DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080517	1	182
				(2)	I-40/6TH ST. OVERPASS (CONWAY) (S)			

CITY OF CONWAY
CONSTRUCTION PLANS

I-40/6TH ST. OVERPASS (CONWAY) (S)

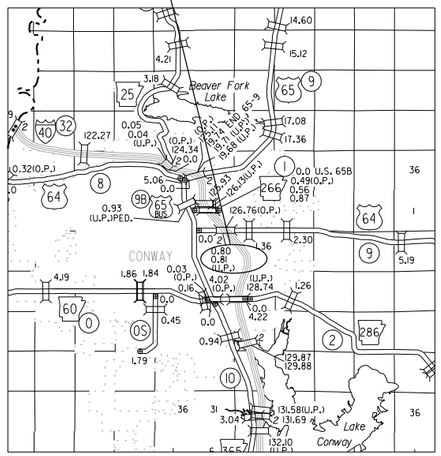
FAULKNER COUNTY

6TH STREET

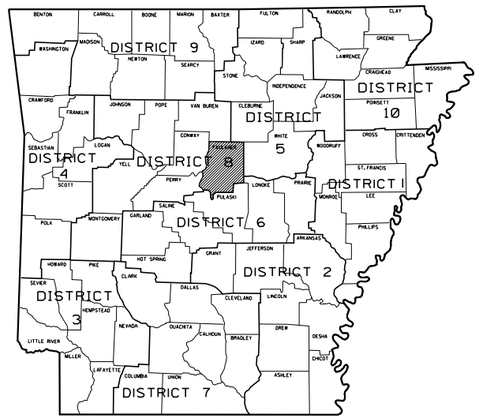
JOB 080517

NOT TO SCALE

PROJECT LOCATION



VICINITY MAP

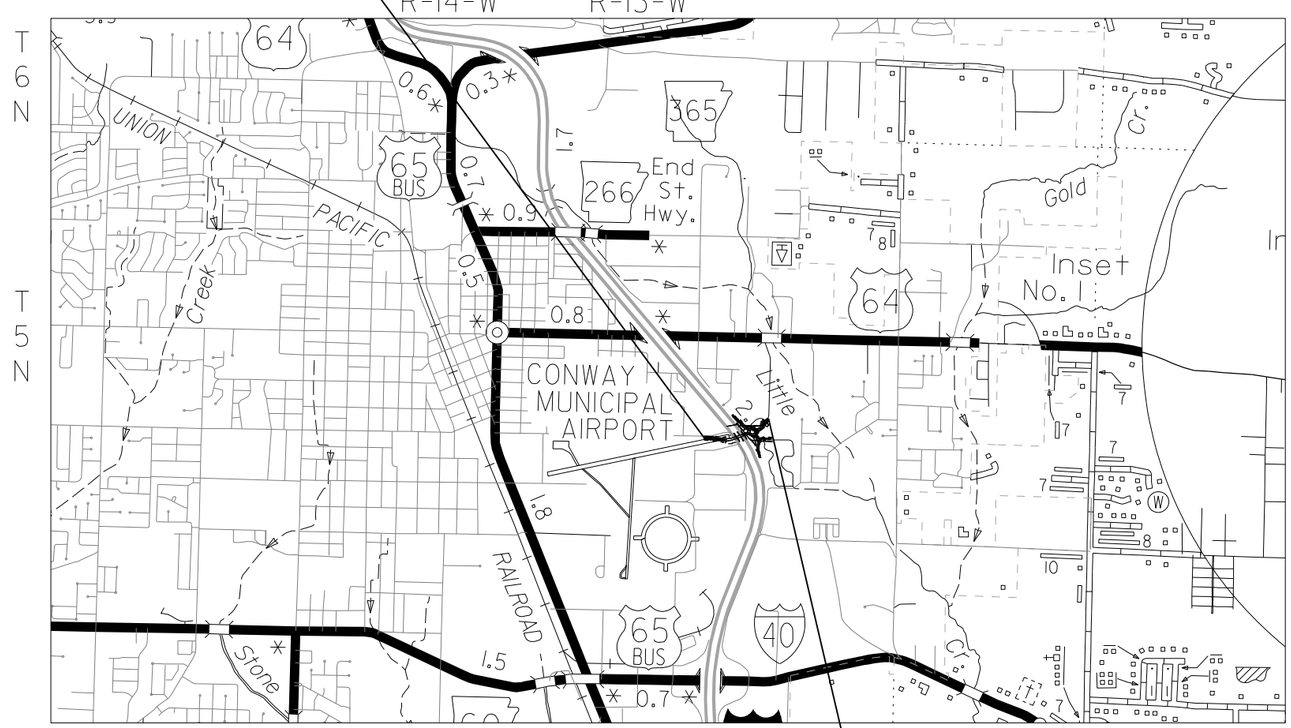


ARKANSAS HIGHWAY DISTRICT 8

BRIDGE DATA

(1) STA. 38+89.88 BRIDGE END
BRIDGE NO. 07345 OVER INTERSTATE 40
212'-0" CONT. COMP. PLATE GIRDER UNIT
46'-0" CLEAR ROADWAY
15°00'00" RT. FORWARD SKEW
214'-2 7/8" BRIDGE LENGTH
STA. 41+04.12 BRIDGE END

BEGIN JOB 080517
STA. 30+30.00



END JOB 080517
STA. 48+40.00

· DESIGN TRAFFIC DATA ·

	6TH ST./ ELSINGER BLVD.	AMITY RD.
DESIGN YEAR	2036	2036
2016 ADT	9,152	9,853
2036 ADT	10,242	12,390
2036 DHV	1127	1,363
DIRECTIONAL DISTRIBUTION	60%	60%
TRUCKS	4%	4%
DESIGN SPEED	30 MPH	30 MPH

N

PROJECT COORDINATES

	BEGIN	MID-POINT	END
LATITUDE	N 35°05'03"	N 35°05'03"	N 35°05'07"
LONGITUDE	W 92°25'06"	W 92°24'55"	W 92°24'46"
STATION	30+30.00	39+35.00	48+40.00

LENGTH COMPUTED ALONG C.L. MEDIAN

GROSS LENGTH OF PROJECT	1810.00 FEET	OR	0.343 MILES
NET LENGTH OF ROADWAY	1595.76 FEET	OR	0.302 MILES
NET LENGTH OF BRIDGES	214.24 FEET	OR	0.041 MILES
NET LENGTH OF PROJECT	1810.00 FEET	OR	0.343 MILES

CERTIFICATE OF AUTHORIZATION
GARVER LLC
No. 766
ARKANSAS ENGINEER

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11835
TODD E. MUELLER
Digitally Signed 05/20/2015

P.E. JOB 080517

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WORKSPACE: AHTD
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REVISED DATE:

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6-1-2015		5-24-2016		6	ARK.			
2-10-2016		8-10-2016		JOB NO.		080517	2	182
3-10-2016		9-27-2016						

(2) INDEX OF SHEETS AND GENERAL NOTES

INDEX OF SHEETS

GENERAL NOTES:

1. GRADE LINE DENOTES FINISHED GRADE WHERE SHOWN ON PLANS.
2. ALL PIPE LINES, POWER, TELEPHONE, AND TELEGRAPH LINES TO BE MOVED OR LOWERED BY THE RESPECTIVE OWNERS AS PER AGREEMENT WITH SUCH OWNERS.
3. ANY EQUIPMENT OR APPURTENANCE THAT INTERFERES WITH THE PROPOSED CONSTRUCTION AND WHICH MAY BE THE PROPERTY OF UTILITY SERVICE ORGANIZATIONS SHALL BE MOVED BY THE OWNERS UNLESS OTHERWISE PROVIDED.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING U.S. MAILBOXES WITHIN THE PROJECT LIMITS IN SUCH A MANNER THAT THE PUBLIC MAY RECEIVE CONTINUED MAIL SERVICE. PAYMENT WILL BE CONSIDERED INCLUDED IN THE PRICE BID FOR THE VARIOUS BID ITEMS.
5. ALL LAND MONUMENTS LOCATED WITHIN THE CONSTRUCTION AREA SHALL BE PROTECTED IN ACCORDANCE WITH SECTION 107.12 OF THE STANDARD SPECIFICATIONS.
6. ALL TREES THAT DO NOT DIRECTLY INTERFERE WITH THE PROPOSED CONSTRUCTION SHALL BE SPARED AS DIRECTED BY THE ENGINEER. CARE AND DISCRETION SHALL BE USED TO INSURE THAT ALL TREES NOT TO BE REMOVED SHALL BE HARMED AS LITTLE AS POSSIBLE DURING THE CONSTRUCTION OPERATIONS.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A FENCE TO CONTROL LIVESTOCK IN AREAS WHERE PASTURES ARE SEVERED. WIRE FENCE MAY BE CONSTRUCTED INITIALLY, OR IN LIEU THEREOF, THE CONTRACTOR AT HIS OWN EXPENSE, MAY ELECT TO PROVIDE TEMPORARY FENCING SUITABLE TO CONTAIN LIVESTOCK.
8. THE EXISTING ASPHALT PAVEMENT TO BE REMOVED FROM THE REMAINING PAVEMENT SHALL BE SEPARATED BY SAWING ALONG A NEAT LINE. AFTER SAWING, THE PAVEMENT TO BE REMOVED SHALL BE CAREFULLY REMOVED IN A MANNER THAT WILL NOT DAMAGE THE PAVEMENT THAT IS TO REMAIN. ANY DAMAGE OF THE ASPHALT PAVEMENT THAT IS TO REMAIN IN PLACE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
9. ALL FLEXIBLE BASE AND ASPHALTIC PAVEMENT REMOVED SHALL BE PAID FOR UNDER PAY ITEM 210 - EXCAVATION AND EMBANKMENT, UNLESS OTHERWISE NOTED.
10. ALL PIPE SHALL BE CLASS III WITH TYPE 3 BEDDING UNLESS NOTED OTHERWISE.

REVISIONS

DATE	REVISION	SHEET NUMBER
6/1/2015	ADDED REVISION BOX	2
6/1/2015	REVISED CONSTRUCT NOTES TO INCLUDE DISTANCE FROM CENTERLINE, INLET LOCATION	50
6/1/2015	REVISED CONSTRUCT NOTES TO INCLUDE DISTANCE FROM CENTERLINE	52
6/1/2015	REVISED REINFORCING STEEL IN BENT NO. 2	63
6/1/2015	REPLACED "M53" WITH "M322 TYPE A"	71
6/1/2015	REVISED B501 BAR LENGTH	77
2/10/2016	REVISED DRAINAGE LAYOUT ON AMITY RD. BETWEEN STA. 19+00 AND 23+60, AND REVISED BOX CULVERT TO REFLECT AS-BUILT GRADES. REVISED TEMPORARY DRAINAGE ON AMITY RD. DETOUR BETWEEN STA. 13+20 AND 13+70. REVISED ALIGNMENT OF AMITY RD. DETOUR FROM STA. 9+70.31 TO STA. 16+61.63. REVISED DRAINAGE ON AMITY RD. FROM STA. 10+46 TO STA. 12+00 AND FROM STA. 13+91 TO STA. 14+75. MOVED THE PROPOSED AMITY RD. CONNECTION FROM AMITY RD. DETOUR STA. 22+62.75 TO AMITY RD. DETOUR STA. 24+45.04. REVISED THE MAINTENANCE OF TRAFFIC STAGING FOR ELSINGER BLVD. STA. 46+00 TO STA. 48+40 TO BE CONSTRUCTED IN STAGE 3. REVISED THE ALIGNMENT OF DRIVEWAY 1 AND TEMPORARY DRIVEWAY TO AVOID ELECTRIC SWITCHGEAR AND SANITARY SEWER MANHOLES. ADDED REINFORCED CONCRETE RETAINING WALL AND PIPE BOLLARDS AT DRIVEWAY 1 STA. 11+75 ON LEFT.	2, 12, 13, 17, 19, 20, 23, 24, 26-29, 31, 32, 34-37, 44-46, 49-52, 54-57, 154, 155, 157, 161, 162, 164, 165, 170-175, 181, 182
3/10/2016	REVISED DRAINAGE ON AMITY RD. RT FROM STA. 14+70 TO 14+75	2, 52, 157
5/24/2016	REVISED THE DIMENSIONS OF THE GUIDE SIGN ON ELSINGER AVE. AND REVISED THE LOCATION OF THE SIGN TO STA. 46+30	2, 60, 62
8/10/2016	REVISED INLET LOCATION ON ELSINGER BLVD. AT STA. 43+90 AND REVISED THE TOP ELEVATION SHOWN IN THE PROFILE ON AMITY RD. AT STA. 19+12 RT.	2, 50, 52, 168
9/27/2016	REVISED PATTERNS ON CONCRETE ISLANDS AND TRUCK APRONS	2, 20

STATE OF ARKANSAS
Todd E. Mueller
LICENSED PROFESSIONAL ENGINEER
No.11835
TODD E. MUELLER

Digitally Signed 09/29/2016

INDEX OF SHEETS AND GENERAL NOTES

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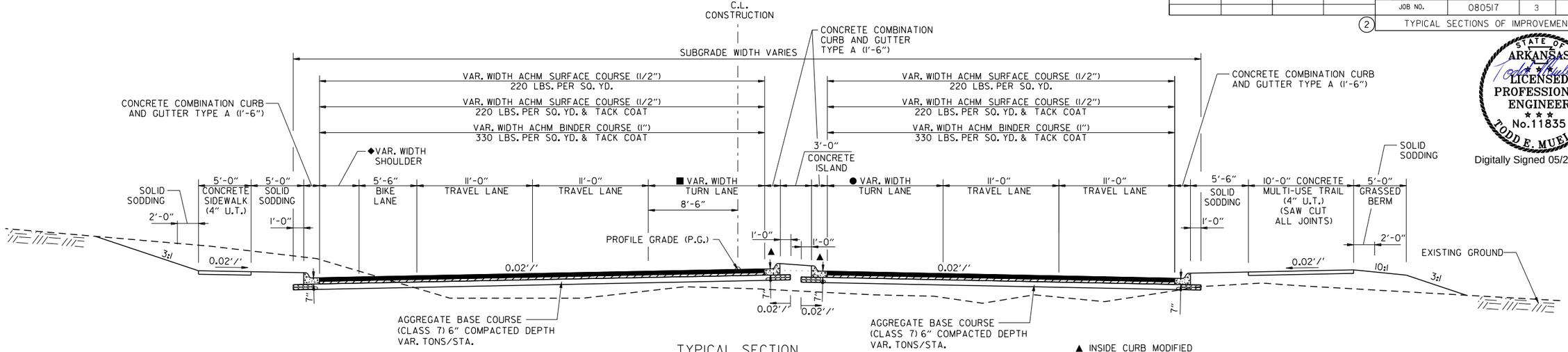
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080517	3	182

(2) TYPICAL SECTIONS OF IMPROVEMENT

STATE OF ARKANSAS
TODD E. MUELLER
LICENSED PROFESSIONAL ENGINEER
No.11835
Digitally Signed 05/20/2015



TYPICAL SECTION
6TH ST.
STA. 30+30.00 TO STA. 31+11.00

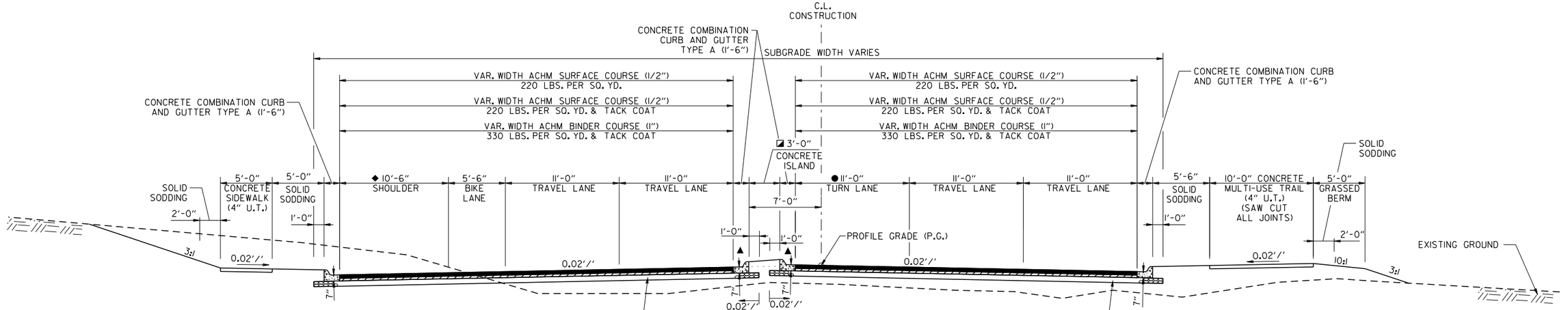
▲ INSIDE CURB MODIFIED TO DRAIN AWAY FROM CURB

■ TRANSITION TURN LANE FROM 11'-0" @ STA. 30+31.00 TO 0'-0" @ STA. 31+11.00

● TRANSITION TURN LANE FROM 0'-0" @ STA. 30+31.00 TO 11'-0" @ STA. 31+11.00

◆ TRANSITION SHOULDER FROM 0'-0" @ STA. 30+53.50 TO 3'-9" @ STA. 31+11.00

NOTE:
CONCRETE MULTI-USE TRAIL SHALL BE MEASURED AND PAID FOR AS "SIDEWALK".



TYPICAL SECTION
6TH ST.
STA. 31+11.00 TO STA. 32+93.50

▲ INSIDE CURB MODIFIED TO DRAIN AWAY FROM CURB

◆ TRANSITION SHOULDER FROM 3'-9" @ STA. 31+11.00 TO 10'-6" @ STA. 32+13.50

TRANSITION SHOULDER FROM 10'-6" @ STA. 32+78.50 TO 0'-0" @ STA. 32+93.50

◪ TRANSITION MEDIAN FROM 3'-0" CONCRETE ISLAND TO 14'-0" GRASSED MEDIAN @ STA. 32+13.50

● TRANSITION TURN LANE FROM 11'-0" TO 0'-0" @ STA. 32+13.50

NOTES:

1. REFER TO CROSS SECTIONS FOR DEVIATIONS FROM NORMAL SLOPES. NO CHANGES SHALL BE MADE FROM THE PLANNED SLOPES WITHOUT THE APPROVAL OF THE ENGINEER.

2. THE THICKNESS OF AGGREGATE BASE COURSE SHALL BE WITHIN PLUS OR MINUS ONE INCH OF THE PLAN THICKNESS SHOWN. THE CONTRACTOR WILL CORRECT ANY DEFICIENT THICKNESS THAT DOES NOT MEET THE TOLERANCE INDICATED. PAYMENT WILL NOT BE MADE FOR MATERIAL PLACED IN EXCESS OF THE TOLERANCE INDICATED.

3. THE FINAL 2" OF SURFACE COURSE IS TO BE PLACED AFTER ALL OTHER COURSES HAVE BEEN LAID. LONGITUDINAL JOINTS SHALL BE AT LANE LINES.

TYPICAL SECTIONS OF IMPROVEMENT

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FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080517	4	182

(2) TYPICAL SECTIONS OF IMPROVEMENT

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.11835
TODD E. MUELLER
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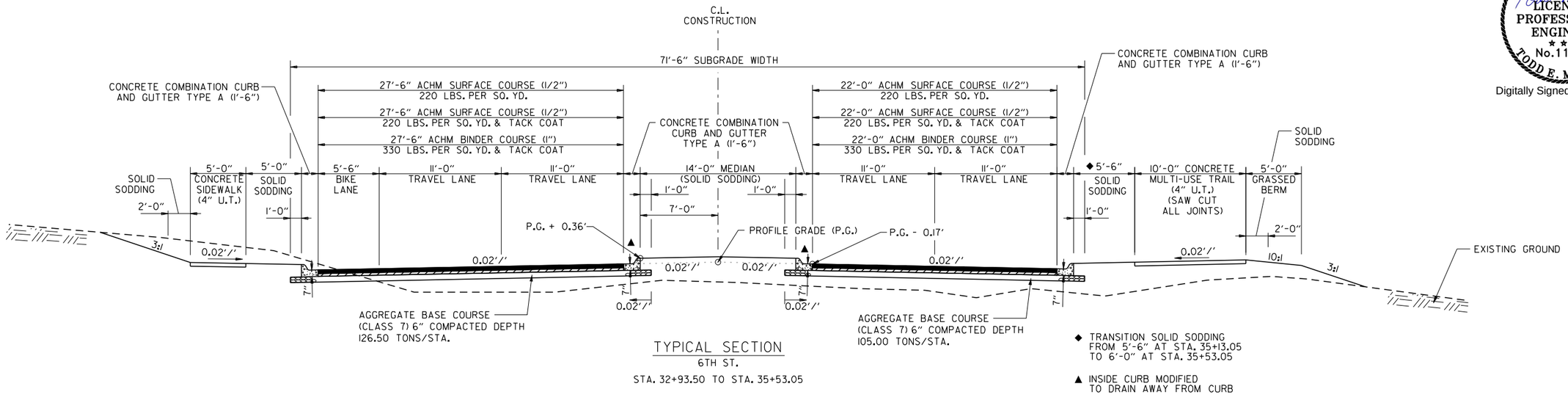
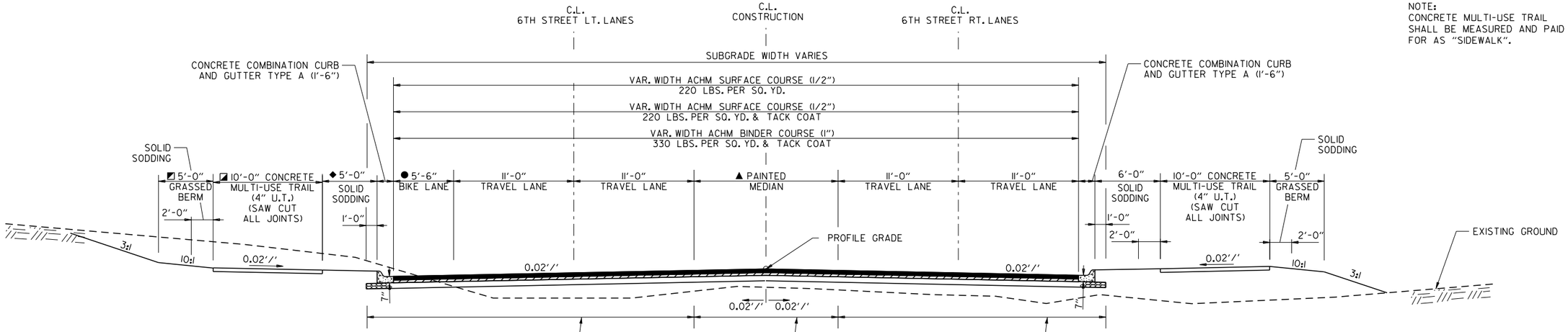


TYPICAL SECTION
6TH ST.
STA. 32+93.50 TO STA. 35+53.05

◆ TRANSITION SOLID SODDING FROM 5'-6" AT STA. 35+13.05 TO 6'-0" AT STA. 35+53.05

▲ INSIDE CURB MODIFIED TO DRAIN AWAY FROM CURB



NOTE:
CONCRETE MULTI-USE TRAIL SHALL BE MEASURED AND PAID FOR AS "SIDEWALK".

TYPICAL SECTION
6TH ST.
STA. 35+53.05 TO STA. 38+17.66

▲ TRANSITION MEDIAN FROM 17'-0" AT STA. 35+53.05 TO 0'-0" AT STA. 37+85.74

● TRANSITION BIKE LANE FROM 5'-6" AT STA. 35+55.44 TO 0'-0" AT STA. 35+95.44

◆ TRANSITION SOLID SODDING FROM 5'-0" AT STA. 35+55.44 TO 6'-0" AT STA. 35+95.44

◪ TRANSITION FROM 5'-0" SIDEWALK AT STA. 35+55.44 TO 10'-0" MULTI-USE TRAIL AT STA. 35+95.44

◪ TRANSITION GRASSED BERM FROM 0'-0" AT STA. 35+55.44 TO 5'-0" AT STA. 35+95.44

NOTES:

1. REFER TO CROSS SECTIONS FOR DEVIATIONS FROM NORMAL SLOPES. NO CHANGES SHALL BE MADE FROM THE PLANNED SLOPES WITHOUT THE APPROVAL OF THE ENGINEER.

2. THE THICKNESS OF AGGREGATE BASE COURSE SHALL BE WITHIN PLUS OR MINUS ONE INCH OF THE PLAN THICKNESS SHOWN. THE CONTRACTOR WILL CORRECT ANY DEFICIENT THICKNESS THAT DOES NOT MEET THE TOLERANCE INDICATED. PAYMENT WILL NOT BE MADE FOR MATERIAL PLACED IN EXCESS OF THE TOLERANCE INDICATED.

3. THE FINAL 2" OF SURFACE COURSE IS TO BE PLACED AFTER ALL OTHER COURSES HAVE BEEN LAID. LONGITUDINAL JOINTS SHALL BE AT LANE LINES.

TYPICAL SECTIONS OF IMPROVEMENT

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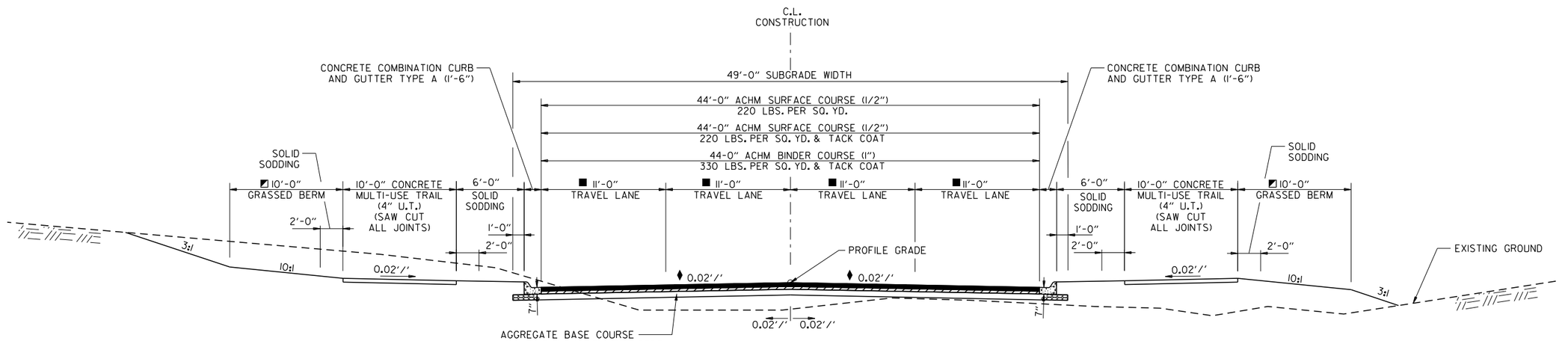
				6	ARK.			
				JOB NO.		080517	5	182

(2) TYPICAL SECTIONS OF IMPROVEMENT

STATE OF ARKANSAS
Todd E. Mueller
LICENSED PROFESSIONAL ENGINEER
No.11835
TODD E. MUELLER

Digitally Signed 05/20/2015



TYPICAL SECTION
6TH ST.
STA. 38+17.66 TO STA. 42+34.92

■ TRAVEL LANES VARY AS SECTION APPROACHES ROUNDABOUT (SEE SPECIAL DETAILS)

♦ CROSS SLOPES VARY AS SECTION APPROACHES ROUNDABOUT TO MATCH CIRCULATORY ROADWAY VERTICAL PROFILE (SEE FORM GRADE DETAILS)

◩ TRANSITION GRASSED BERM FROM 0'-0" AT STA. 41+04.12 TO 10'-0" AT STA. 41+30.00

NOTE:
CONCRETE MULTI-USE TRAIL SHALL BE MEASURED AND PAID FOR AS "SIDEWALK".

NOTES:

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TYPICAL SECTIONS OF IMPROVEMENT

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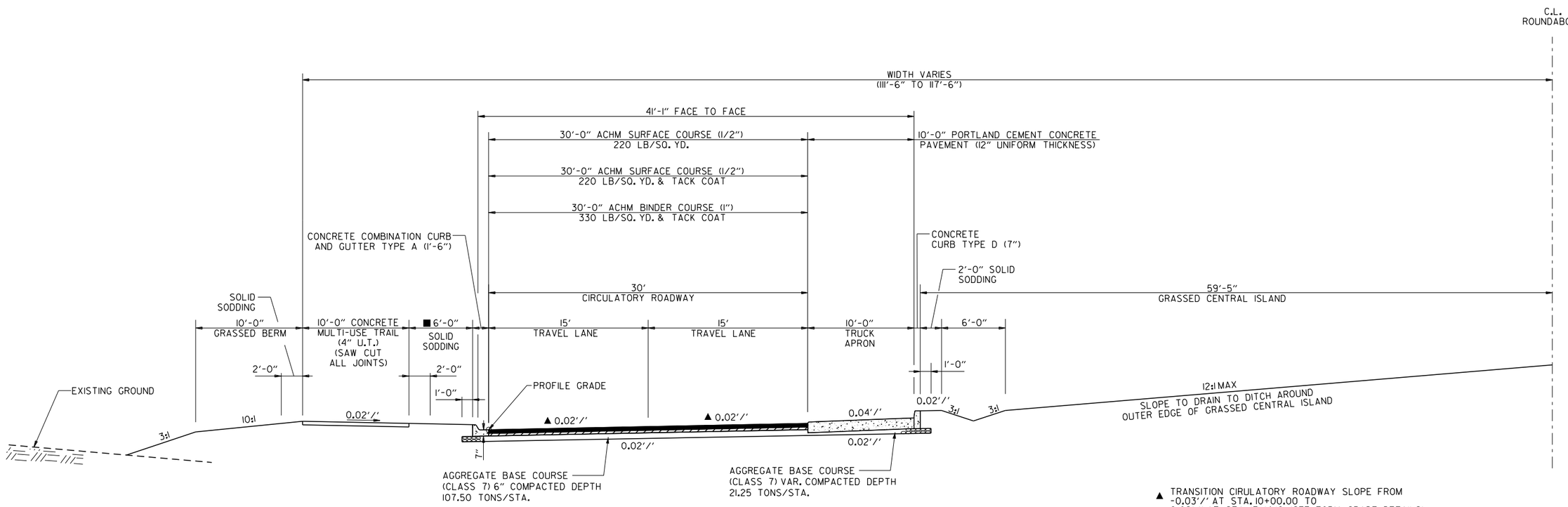
				6	ARK.			
				JOB NO.		080517	6	182

(2) TYPICAL SECTIONS OF IMPROVEMENT

STATE OF ARKANSAS
Todd E. Mueller
LICENSED PROFESSIONAL ENGINEER
No.11835
TODD E. MUELLER
Digitally Signed 05/20/2015



NOTE:
CONCRETE MULTI-USE TRAIL SHALL BE MEASURED AND PAID FOR AS "SIDEWALK".

TYPICAL SECTION
ROUNDABOUT
STA. 10+00.00 TO STA. 16+28.32

▲ TRANSITION CIRULATORY ROADWAY SLOPE FROM -0.03'/' AT STA. 10+00.00 TO 0.02'/' AT STA. 13+14.16 (SEE FORM GRADE DETAILS)

■ 6'-0" SOLID SODDING FROM STA. 15+46.29 TO STA. 11+60.57 AND 0'-0" SOLID SODDING FROM STA. 11+60.57 TO STA. 15+46.29

NOTES:

1. REFER TO CROSS SECTIONS FOR DEVIATIONS FROM NORMAL SLOPES. NO CHANGES SHALL BE MADE FROM THE PLANNED SLOPES WITHOUT THE APPROVAL OF THE ENGINEER.

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TYPICAL SECTIONS OF IMPROVEMENT

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				JOB NO.		080517	7	182

(2) TYPICAL SECTIONS OF IMPROVEMENT

STATE OF ARKANSAS
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LICENSED PROFESSIONAL ENGINEER
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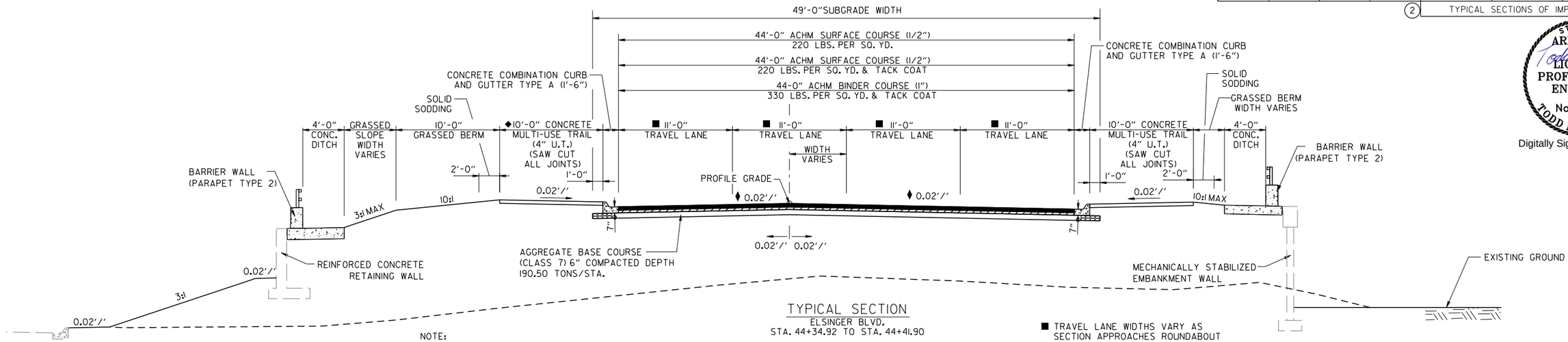


TYPICAL SECTION
ELSINGER BLVD.
STA. 44+34.92 TO STA. 44+41.90

NOTE:
REINFORCED CONCRETE RETAINING WALL WILL FOLLOW ALIGNMENT LOCATED ON RETAINING WALL SHEETS.

■ TRAVEL LANE WIDTHS VARY AS SECTION APPROACHES ROUNDABOUT (SEE SPECIAL DETAILS)

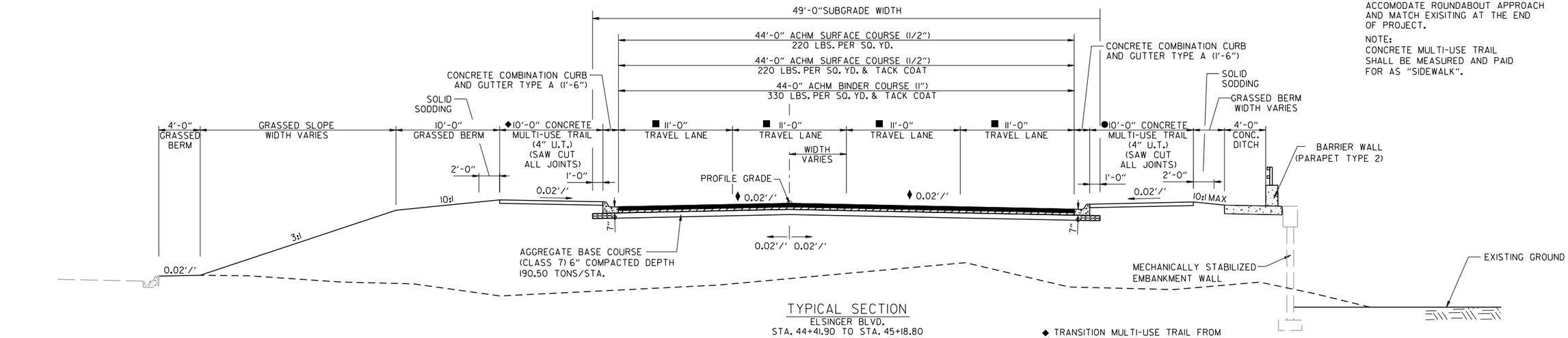
◆ CROSS SLOPES VARY AS SECTION APPROACHES ROUNDABOUT TO MATCH CIRCULATORY ROADWAY VERTICAL PROFILE (SEE FORM GRADE DETAILS)

NOTE:
SIDEWALK BUILT INTERGRALLY WITH PARAPET (TYPE I) IS CONSIDERED SUBSIDIARY TO THE PARAPET WALL AND WILL NOT BE MEASURED FOR SEPERATE PAYMENT.

NOTE:
MECHANICALLY STABILIZED EMBANKMENT WALL WILL FOLLOW ALIGNMENT LOCATED ON MSE WALL SHEETS.

NOTE:
ELSINGER ALIGNMENT OFFSET TO ACCOMODATE ROUNDABOUT APPROACH AND MATCH EXISITING AT THE END OF PROJECT.

NOTE:
CONCRETE MULTI-USE TRAIL SHALL BE MEASURED AND PAID FOR AS "SIDEWALK".



TYPICAL SECTION
ELSINGER BLVD.
STA. 44+41.90 TO STA. 45+18.80

◆ TRANSITION MULTI-USE TRAIL FROM 10'-0" AT STA. 44+82.13 TO 6'-0" AT STA. 45+17.13

● TRANSITION MULTI-USE TRAIL FROM 10'-0" AT STA. 44+77.84 TO 6'-0" SIDEWALK AT STA. 45+12.84

■ TRAVEL LANE WIDTHS VARY AS SECTION APPROACHES ROUNDABOUT (SEE SPECIAL DETAILS)

◆ CROSS SLOPES VARY AS SECTION APPROACHES ROUNDABOUT TO MATCH CIRCULATORY ROADWAY VERTICAL PROFILE (SEE FORM GRADE DETAILS)

NOTES:

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TYPICAL SECTIONS OF IMPROVEMENT

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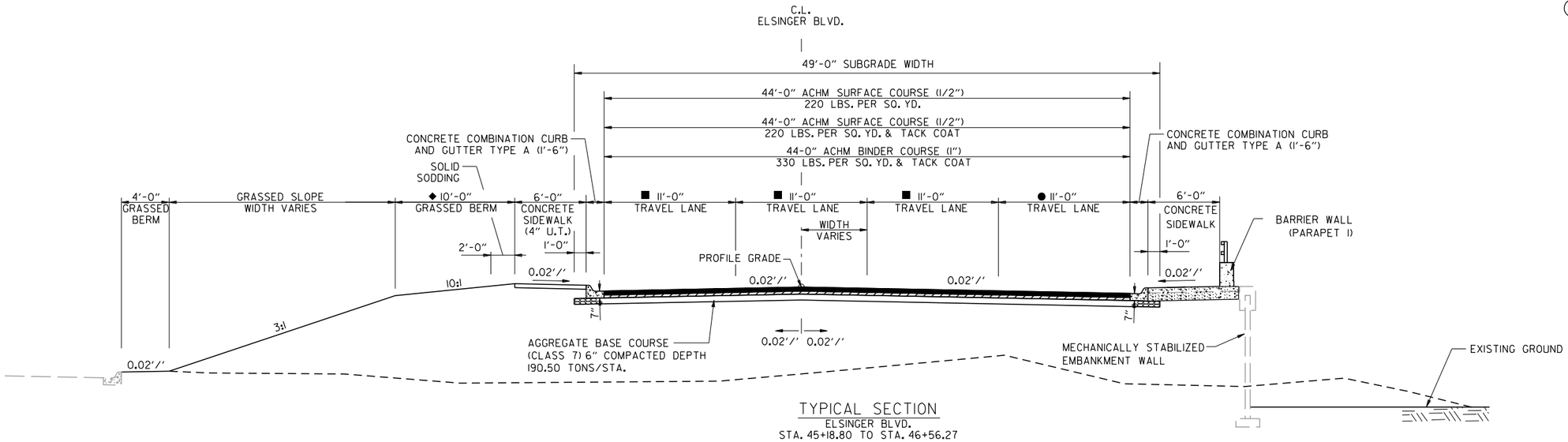
				6	ARK.			
				JOB NO.		080517	8	182

(2) TYPICAL SECTIONS OF IMPROVEMENT

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.11835
TODD E. MUELLER
Digitally Signed 05/20/2015



TYPICAL SECTION
ELSINGER BLVD.
STA. 45+18.80 TO STA. 46+56.27

● TRANSITION TRAVEL LANE FROM 11'-0" AT STA. 45+30.00 TO 0'-0" AT STA. 46+95.00

◆ TRANSITION GRASSED BERM FROM 10'-0" AT STA. 46+30.00 TO 0'-0" AT STA. 46+50.00

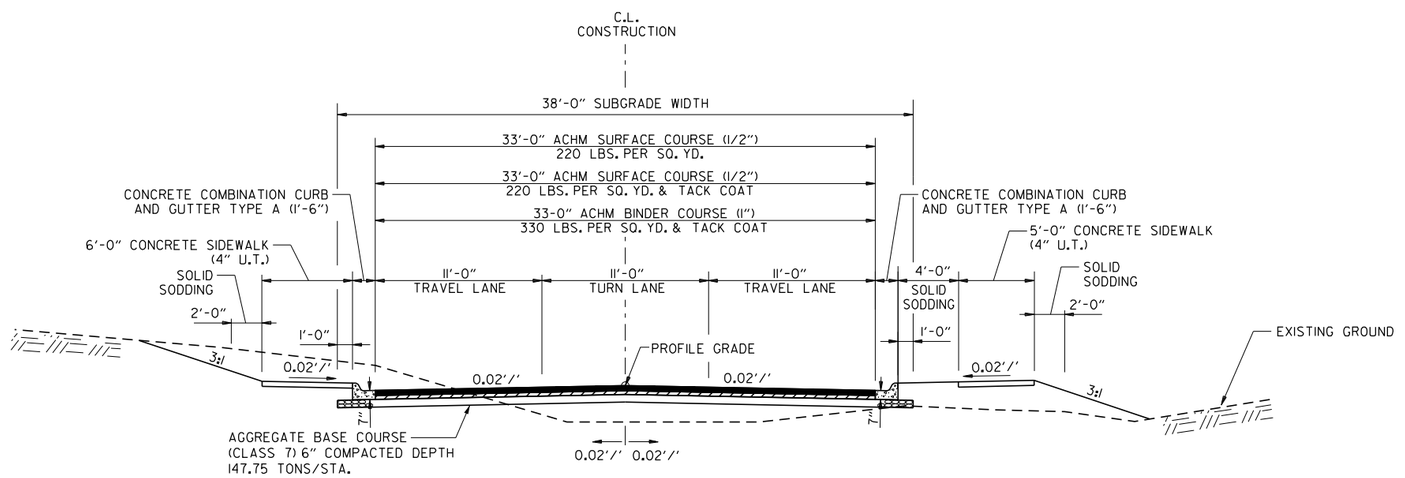
■ TRAVEL LANE WIDTHS VARY AS SECTION APPROACHES ROUNDABOUT (SEE SPECIAL DETAILS)

♦ CROSS SLOPES VARY AS SECTION APPROACHES ROUNDABOUT TO MATCH CIRCULATORY ROADWAY VERTICAL PROFILE (SEE FORM GRADE DETAILS)

NOTE:
SIDEWALK BUILT INTERGRALLY WITH PARAPET (TYPE I) IS CONSIDERED SUBSIDIARY TO THE PARAPET WALL AND WILL NOT BE MEASURED FOR SEPERATE PAYMENT.

NOTE:
MECHANICALLY STABILIZED EMBANKMENT WALL WILL FOLLOW ALIGNMENT LOCATED ON MSE WALL SHEETS.

NOTE:
ELSINGER ALIGNMENT OFFSET TO ACCOMODATE ROUNDABOUT APPROACH AND MATCH EXISITING AT THE END OF PROJECT.



TYPICAL SECTION
ELSINGER BLVD.
STA. 46+56.27 TO STA. 48+40.00

NOTES:

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2. THE THICKNESS OF AGGREGATE BASE COURSE SHALL BE WITHIN PLUS OR MINUS ONE INCH OF THE PLAN THICKNESS SHOWN. THE CONTRACTOR WILL CORRECT ANY DEFICIENT THICKNESS THAT DOES NOT MEET THE TOLERANCE INDICATED. PAYMENT WILL NOT BE MADE FOR MATERIAL PLACED IN EXCESS OF THE TOLERANCE INDICATED.

3. THE FINAL 2" OF SURFACE COURSE IS TO BE PLACED AFTER ALL OTHER COURSES HAVE BEEN LAID. LONGITUDINAL JOINTS SHALL BE AT LANE LINES.

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WORKSPACE: AHTD
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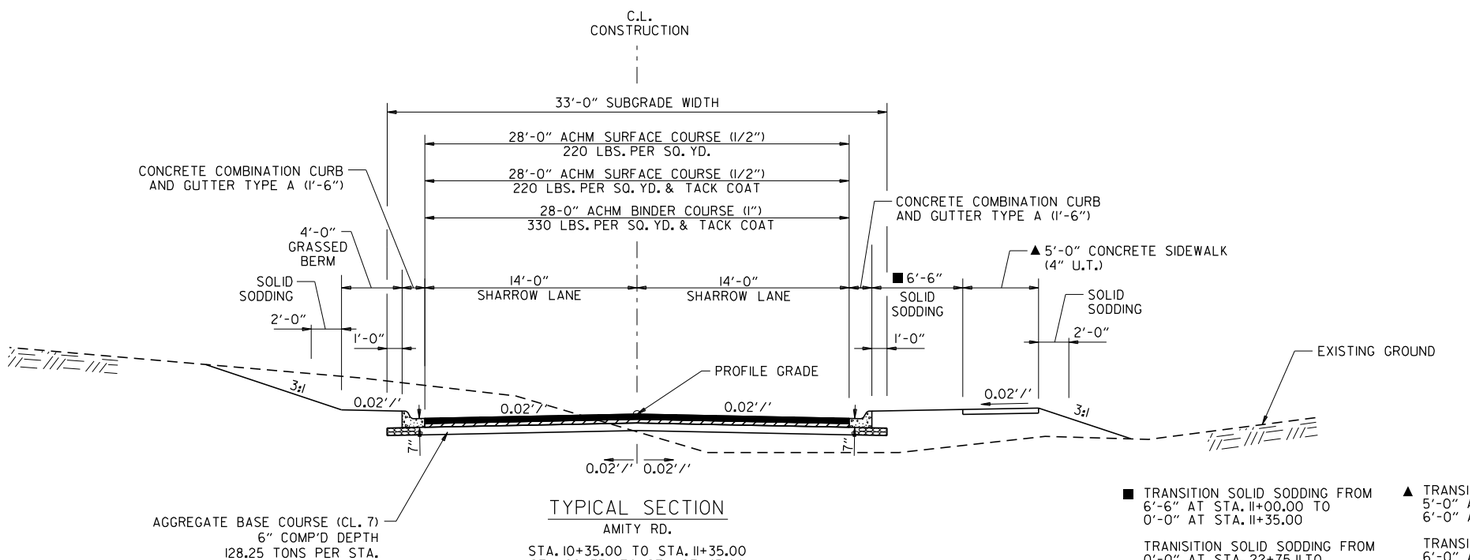
REVISED DATE:

TYPICAL SECTIONS OF IMPROVEMENT

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080517	9	182

(2) TYPICAL SECTIONS OF IMPROVEMENT

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.11835
TODD E. MUELLER
Digitally Signed 05/20/2015



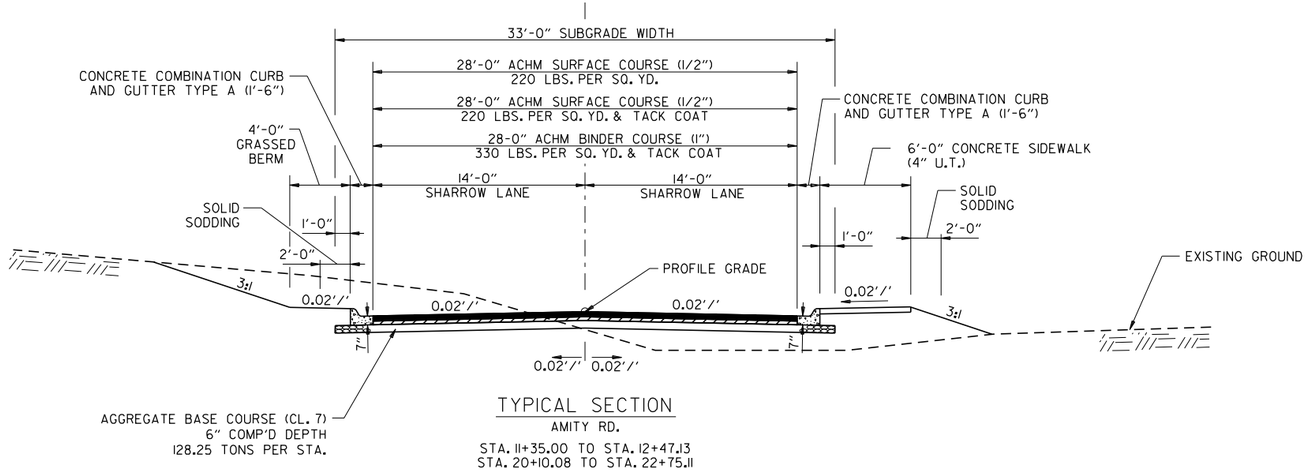
TYPICAL SECTION
AMITY RD.
STA. 10+35.00 TO STA. 11+35.00
STA. 22+75.11 TO STA. 23+45.00

■ TRANSITION SOLID SODDING FROM 6'-6" AT STA. 11+00.00 TO 0'-0" AT STA. 11+35.00

TRANISITION SOLID SODDING FROM 0'-0" AT STA. 22+75.11 TO 6'-6" AT STA. 22+93.11

▲ TRANSITION SIDEWALK FROM 5'-0" AT STA. 11+00.00 TO 6'-0" AT STA. 11+35.00

TRANSITION SIDEWALK FROM 6'-0" AT. STA. 22+75.11 TO 5'-0" AT STA. 22+93.11



TYPICAL SECTION
AMITY RD.
STA. 11+35.00 TO STA. 12+47.13
STA. 20+10.08 TO STA. 22+75.11

NOTES:

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TYPICAL SECTIONS OF IMPROVEMENT

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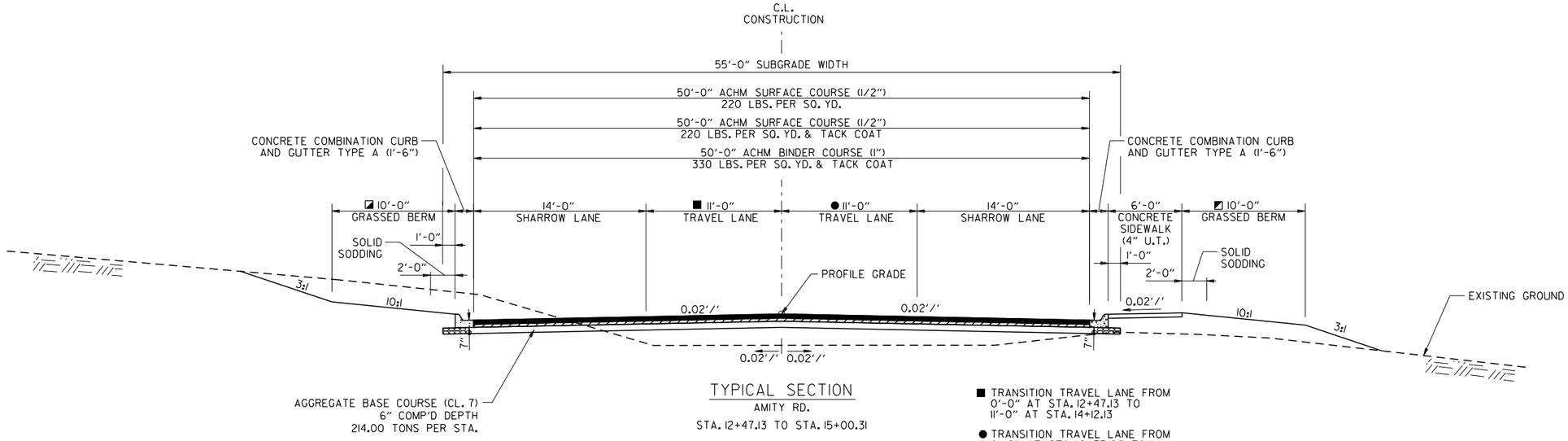
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080517	10	182

(2) TYPICAL SECTIONS OF IMPROVEMENT

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.11835
TODD E. MUELLER
Digitally Signed 05/20/2015



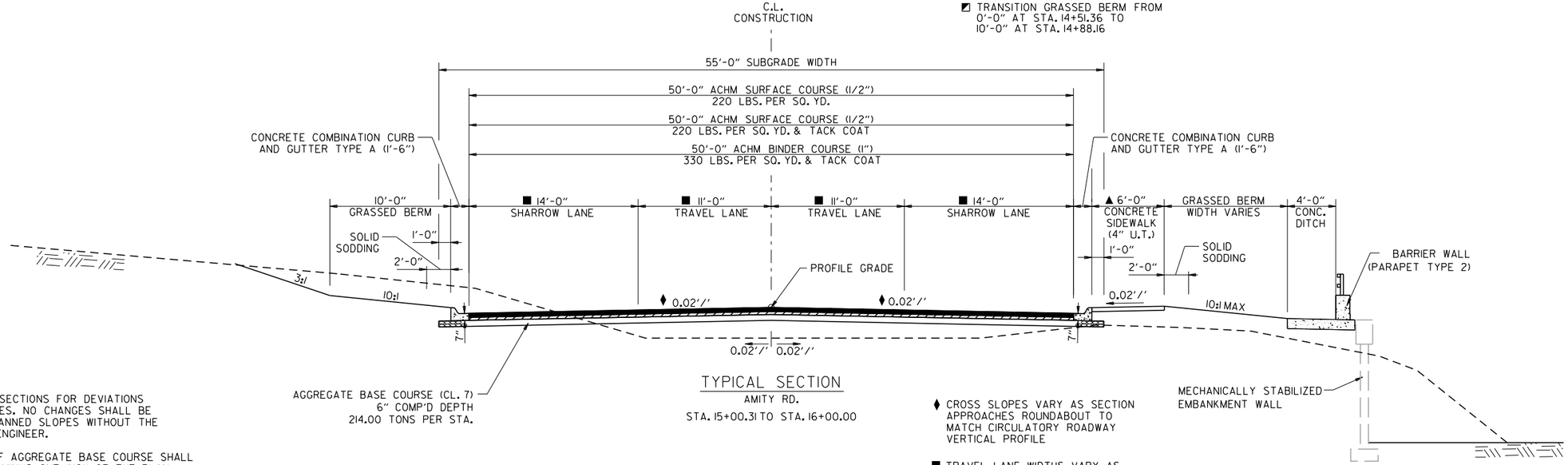
TYPICAL SECTION
AMITY RD.
STA. 12+47.13 TO STA. 15+00.31

■ TRANSITION TRAVEL LANE FROM 0'-0" AT STA. 12+47.13 TO 11'-0" AT STA. 14+12.13

● TRANSITION TRAVEL LANE FROM 0'-0" AT STA. 12+75.06 TO 11'-0" AT STA. 13+75.06

◪ TRANSITION GRASSED BERM FROM 4'-0" AT STA. 14+50.00 TO 10'-0" AT STA. 15+00.00

◩ TRANSITION GRASSED BERM FROM 0'-0" AT STA. 14+51.36 TO 10'-0" AT STA. 14+88.16



TYPICAL SECTION
AMITY RD.
STA. 15+00.31 TO STA. 16+00.00

♦ CROSS SLOPES VARY AS SECTION APPROACHES ROUNDABOUT TO MATCH CIRCULATORY ROADWAY VERTICAL PROFILE

■ TRAVEL LANE WIDTHS VARY AS SECTION APPROACHES ROUNDABOUT (SEE SPECIAL DETAILS)

▲ TRANSITION SIDEWALK FROM 6'-0" AT STA. 15+19.87 TO 10'-0" AT STA. 15+54.87

NOTE:
MECHANICALLY STABILIZED EMBANKMENT WALL WILL FOLLOW ALIGNMENT LOCATED ON MSE WALL SHEETS.

NOTES:

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TYPICAL SECTIONS OF IMPROVEMENT

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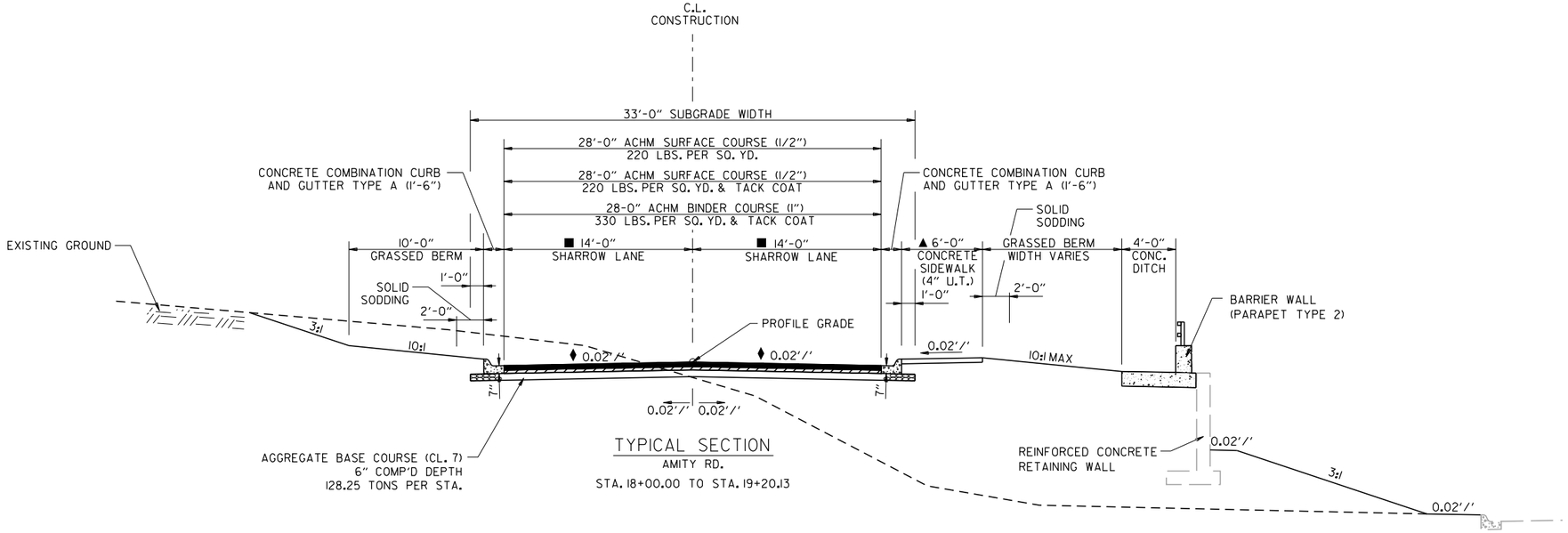
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080517	11	182

(2) TYPICAL SECTIONS OF IMPROVEMENT

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.11835
TODD E. MUELLER
Digitally Signed 05/20/2015



TYPICAL SECTION
AMITY RD.
STA. 18+00.00 TO STA. 19+20.13

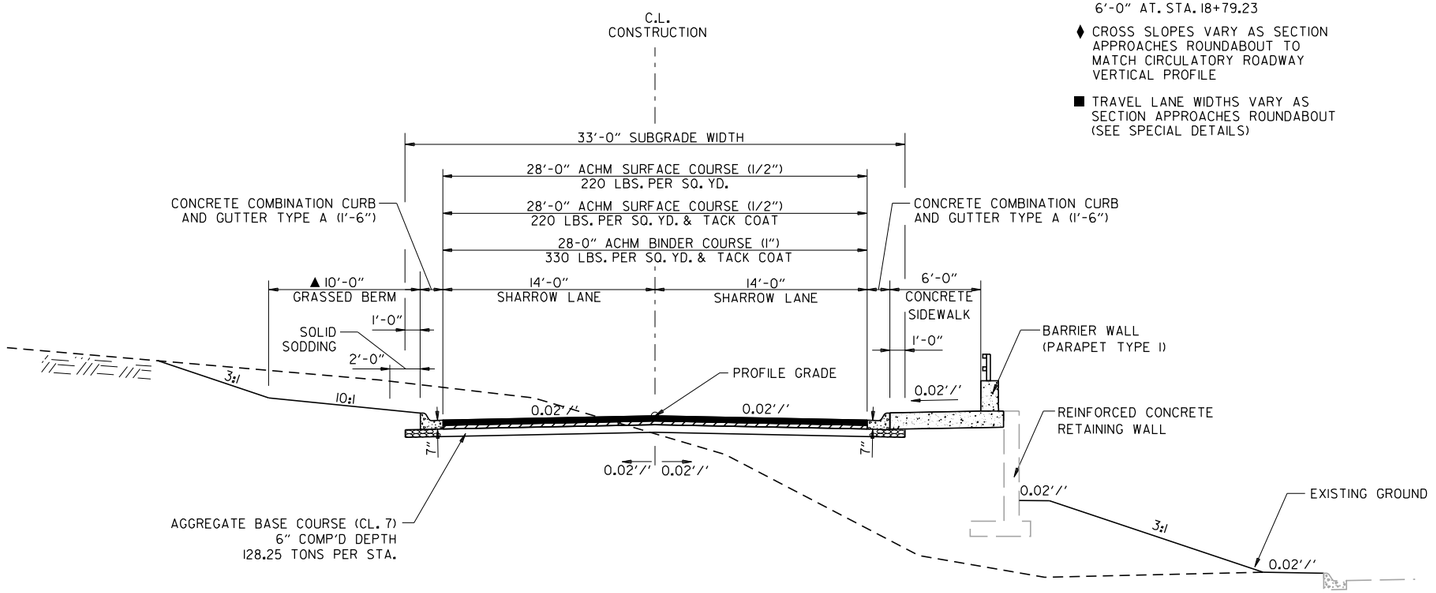
▲ TRANSITION SIDEWALK FROM 10'-0" AT STA. 18+44.23 TO 6'-0" AT. STA. 18+79.23

♦ CROSS SLOPES VARY AS SECTION APPROACHES ROUNDABOUT TO MATCH CIRCULATORY ROADWAY VERTICAL PROFILE

■ TRAVEL LANE WIDTHS VARY AS SECTION APPROACHES ROUNDABOUT (SEE SPECIAL DETAILS)

NOTE:
REINFORCED CONCRETE RETAINING WALL WILL FOLLOW ALIGNMENT LOCATED ON RETAINING WALL SHEETS.

NOTE:
SIDEWALK BUILT INTERGRALLY WITH PARAPET (TYPE I) IS CONSIDERED SUBSIDIARY TO THE PARAPET WALL AND WILL NOT BE MEASURED FOR SEPERATE PAYMENT.



TYPICAL SECTION
AMITY RD.
STA. 19+20.13 TO STA. 20+10.08

▲ TRANSITION GRASSED BERM FROM 10'-0" AT STA. 19+50.00 TO 4'-0" AT. STA. 20+00.00

NOTES:

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TYPICAL SECTIONS OF IMPROVEMENT

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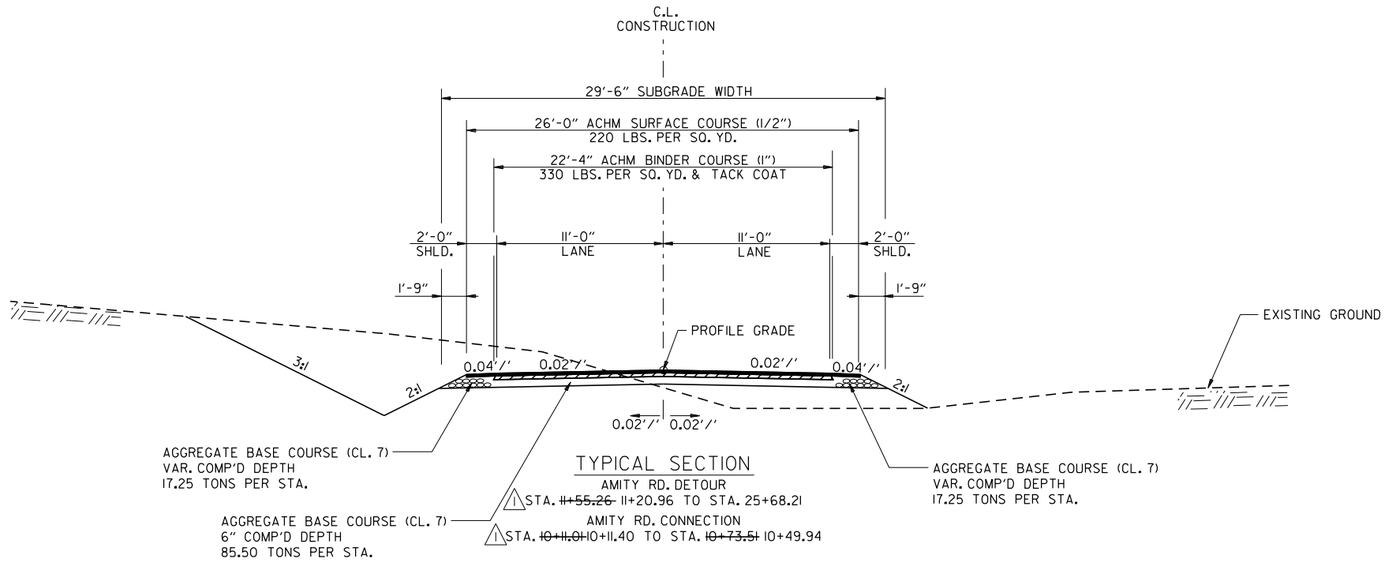
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED
2-10-2016			

FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080517	12	182

(2) TYPICAL SECTIONS OF IMPROVEMENT

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.11835
TODD E. MUELLER

Digitally Signed 02/10/2016



TYPICAL SECTION

AMITY RD. DETOUR

1 STA. ~~11+55.26~~ 11+20.96 TO STA. 25+68.21

AMITY RD. CONNECTION

1 STA. ~~10+11.01~~ 10+11.40 TO STA. ~~10+73.51~~ 10+49.94

NOTES:

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TYPICAL SECTIONS OF IMPROVEMENT

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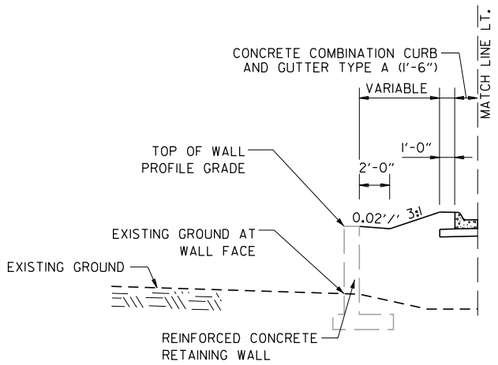
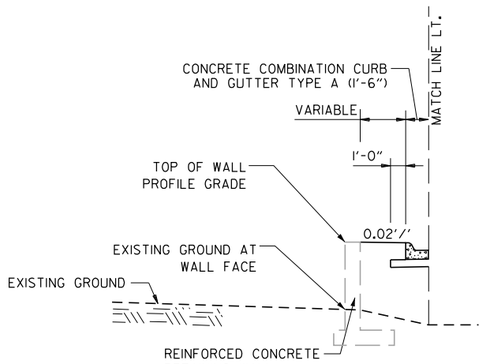
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2-10-2016				6	ARK.			
				JOB NO.		080517	13	182

(2) TYPICAL SECTIONS OF IMPROVEMENT

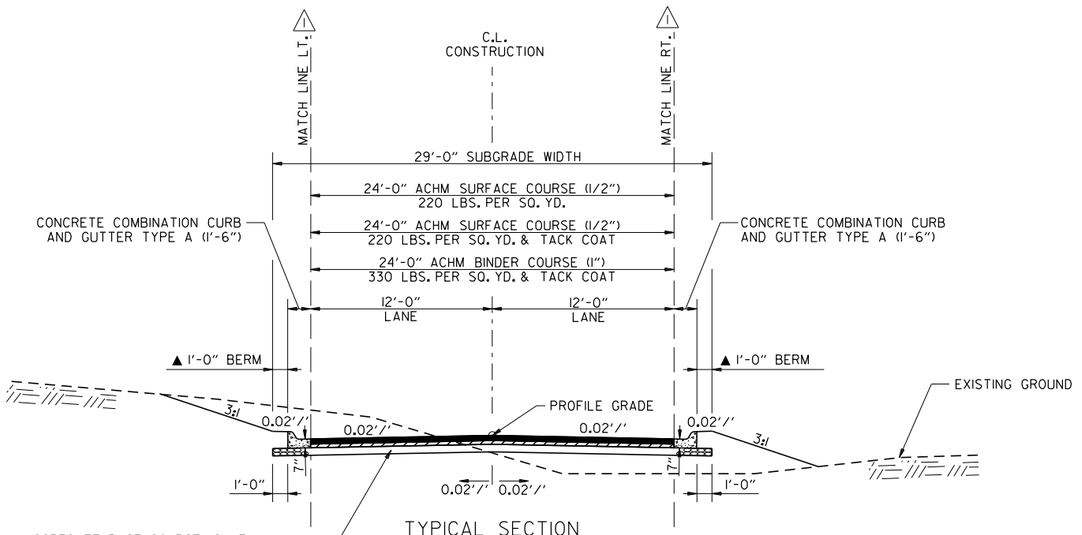
STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.11835
TODD E. MUELLER
Digitally Signed 02/10/2016



⚠1 TYPICAL SECTION
REINFORCED CONCRETE RETAINING WALL NO. 5
STA. 11+61.61 TO STA. 11+78.00



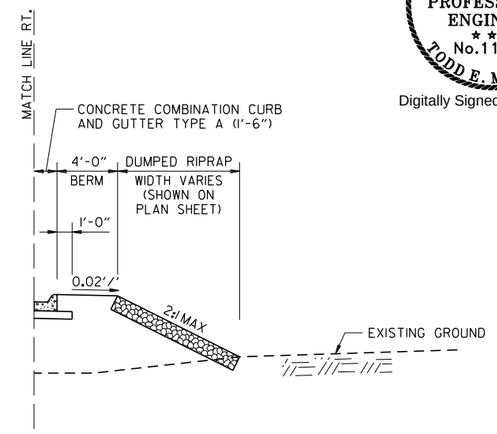
⚠1 TYPICAL SECTION
REINFORCED CONCRETE RETAINING WALL NO. 5
STA. 11+78.00 TO STA. 11+90.66



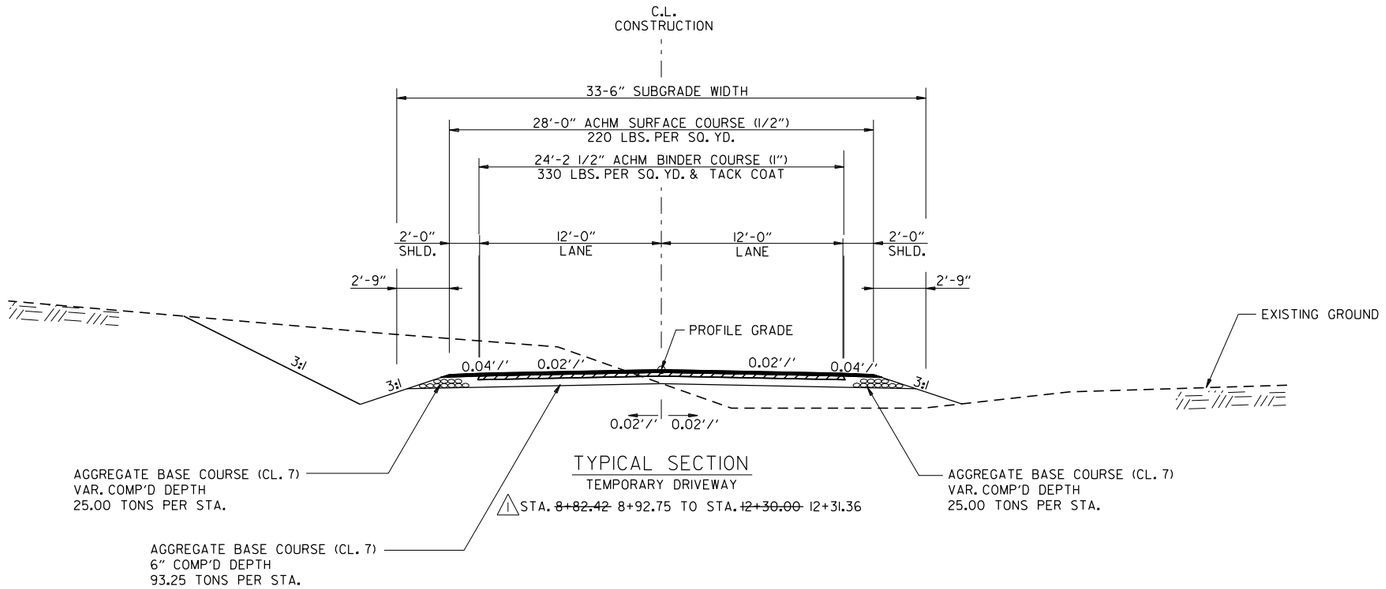
TYPICAL SECTION
DRIVEWAY 1
⚠1 STA. ~~10+25.96~~ 10+26.02 TO STA. ~~14+16.74~~ 14+13.75

▲ TRANSITION BERM FROM 1'-0" AT STA. 13+25.00 TO 4'-0" AT. STA. 13+35.00

⚠1 NOTE:
DRIVEWAY 1 STA. ~~12+30.00~~ 12+31.36 TO STA. ~~14+16.74~~ 14+13.75 TO BE CONSTRUCTED AT END OF TEMPORARY DRIVEWAY AS SHOWN IN PLANS



⚠1 TYPICAL SECTION
STA. 11+40.00 TO STA. 12+25.00



TYPICAL SECTION
TEMPORARY DRIVEWAY
⚠1 STA. ~~8+82.42~~ 8+92.75 TO STA. ~~12+30.00~~ 12+31.36

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TYPICAL SECTIONS OF IMPROVEMENT

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080517	14	182

(2) INTERSECTION DETAILS

STATE OF ARKANSAS
Todd E. Mueller
LICENSED PROFESSIONAL ENGINEER
No.11835
TODD E. MUELLER
Digitally Signed 05/20/2015

N
1"=60'

CENTERPOINTS OF RADII

	RADIUS	STATION	OFFSET
RI	35'	42+02.38	70.12' LT.
R2	100'	41+85.45	132.88' LT.
R3	278'	40+85.22	300.00' LT.
R4	300'	41+00.72	278.00' LT.
R5	300'	41+40.53	320.68' RT.
R6	120	41+67.49	142.71' RT.
R7	120'	15+41.46	152.53' LT.
R8	300'	14+89.95	325.00' LT.
R9	300'	15+06.97	325.00' RT.
RI0	120'	15+36.75	147.48' RT.
RII	120'	44+85.95	151.97' RT.
RI2	300'	46+06.63	316.50' LT.
RI3	140'	45+44.24	163.58' LT.
RI4	140'	18+75.49	163.71' RT.
RI5	300'	20+47.02	314.00' RT.
RI6	64'	18+44.26	78.00' LT.

•RI-R6 AND RII-RI3 ARE BASED OFF OF SIXTH ST./ELSINGER BLVD. ALIGNMENT
R7-RI0 AND RI4-RI6 ARE BASED OFF OF AMITY RD. ALIGNMENT

ROUNDABOUT LAYOUT

INTERSECTION DETAILS

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6	ARK.			
JOB NO.		080517	15	182

2 INTERSECTION DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.11835
TODD E. MUELLER
Digitally Signed 05/20/2015

CENTERPOINTS OF RADII			
	RADIUS	STATION	OFFSET
R1	50′	31+95.71	54.00′ LT.
R2	0.5′	32+22.40	6.50′ RT.
R3	0.5′	32+14.08	6.50′ LT.
R4	40′	32+23.49	34.50′ LT.
R5	2′	32+56.40	5.00′ LT.

N

1″=30′

160′ TAPER
+53.50
+13.50
33′
15′ TAPER
+78.50
+93.50
1′-6″ CONCRETE COMBINATION CURB AND GUTTER
5′ GRASS BUFFER
5′ SIDEWALK
+53.50 -36.00
+13.50 -46.50
DRIVEWAY 7
+78.50 -46.50
+93.50 -36.00
CONSTRUCTION LIMITS
38′
27.5′
30+00
38.5′
CONCRETE MEDIAN
R1
50′R
+14.08 -7.00
0.5′R
R3
R4
+55.40 -6.73
+56.40 -7.00
40′R
+14.15 -6.00
+95.71 -4.00
+22.34 6.00
0.5′R
R2
+43.49 0.14
2′R
R5
+02.27 -4.43
+22.40 7.00
+28.74 5.16
GRASSED MEDIAN
C.L. 6TH ST.
34+00
9′
6′
2.5′
33′
22′
17′
14′
10′ MULTI-USE
5.5′ GRASS BUFFER
+31.00
+11.00
80′ TAPER
SSMH
GATE

INTERSECTION DETAIL
6TH ST. AND
DRIVEWAY 7

INTERSECTION DETAILS

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JOB NO.		080517	16	182
(2)	SPECIAL DETAILS			

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.11835
TODD E. MUELLER
Digitally Signed 05/20/2015

N

1"=40'

C.L. AMITY RD.

C.L. AMITY RD. STA. 18+00.00=
CIRCULATORY ROADWAY STA. 15+46.29

4'-0" GRASSED BERM @ 2.00%

2'-0" GRASSED BERM @ 2.00%

VAR. WIDTH GRASSED BERM @ 2.00%

10'-0" GRASSED BERM

C.L. ELSINGER BLVD.

C.L. 6TH ST.

C.L. 6TH ST. STA. 42+34.92=
CIRCULATORY ROADWAY STA. 10+00.00

C.L. AMITY RD. STA. 16+00.00=
CIRCULATORY ROADWAY STA. 11+60.57

C.L. ELSINGER BLVD. STA. 44+34.92=
CIRCULATORY ROADWAY STA. 13+14.16

C.L. AMITY RD.

ROUNDABOUT
FORM GRADE DETAILS

SPECIAL DETAILS

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2 SPECIAL DETAILS

STATE OF ARKANSAS
Todd E Mueller
LICENSED PROFESSIONAL ENGINEER
No.11835
TODD E. MUELLER
Digitally Signed 02/10/2016

N

1"=20'

CENTERPOINTS OF RADII			
	RADIUS	STATION	OFFSET
R1	50'	19+80.83	104.78' RT.
R2	40'	46+08.10	96.30' LT.

•R1 IS BASED OFF OF AMITY RD. ALIGNMENT
•R2 IS BASED OFF OF 6TH ST./ ELSINGER BLVD. ALIGNMENT

NOTE: DRAINAGE STRUCTURES ARE SHOWN ON THE APPROPRIATE PROFILE.

MATCH LINE ELSINGER BLVD. STA. 46+35.00

+35.00
-57.10

+09.50
-56.33

+82.54
-65.53

R2

MATCH EXISTING 1'-6" CURB

+85.80
54.92

R1

+40.29
64.95

C.L. ELSINGER BLVD. STA. 43+94.18, 148.30' LT. =
C.L. AMITY RD. STA. 17+68.04, 144.48' RT.

SAW CUT AND MATCH EXISTING

SAW CUT AND MATCH EXISTING

33.5'

33.5'

20.00

C.L. AMITY RD.

C.L. 6TH ST.

45.00

C.L. AMITY RD.

GATE

ETS

SSMH

STMH

SPECIAL DETAILS

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(2) SPECIAL DETAILS

STATE OF ARKANSAS
Todd E. Mueller
LICENSED PROFESSIONAL ENGINEER
No.11835
TODD E. MUELLER
Digitally Signed 05/20/2015

CENTERPOINTS OF RADII			
	RADIUS	STATION	OFFSET
RI	30′	46+89.85	46.50′ LT.
R2	15′	47+06.52	48.01′ LT.
R3	4′	47+04.28	-58.88′ LT.
R4	250′	46+37.39	267.13′ LT.
R5	30′	47+97.16	46.50′ LT.
R6	15′	47+80.49	48.01′ LT.
R7	4′	47+85.23	58.68′ LT.
R8	260′	48+67.33	297.63′ LT.
R9	80′	48+25.80	163.04′ LT.
RI0	15′	47+98.04	101.04′ LT.
RII	15′	47+15.55	106.70′ LT.
RI2	7′	46+99.83	97.71′ LT.
RI3	5′	46+49.48	89.44′ LT.
RI4	30′	46+35.52	112.61′ LT.
RI5	2′	46+43.86	55.46′ LT.

▪RI-RI5 ARE BASED OFF OF 6TH ST./ELSINGER BLVD. ALIGNMENT

NOTE: DRAINAGE STRUCTURES ARE SHOWN ON THE APPROPRIATE PROFILE.

N
1"=20'

MATCH LINE ELSINGER BLVD. STA. 46+35.00

30.5'

111+30

+29.22 -124.54
+34.48 -111.08
+98.91 -124.32
+75.24 -114.43
+14.94 -100.81
+78.99 -98.72
+24.04 -83.05
+92.99 -86.58
+93.91 -102.98
+00.68 -90.74
+16.72 -91.73
+53.51 -93.27
+35.92 -82.61
+44.28 -83.40
+50.76 -84.54

1'-6" CURB
SOLID SODDING
MATCH EXISTING 1'-6" CURB
MATCH EXISTING 1'-6" CURB
MATCH EXISTING 1'-6" CURB
C.L. DRIVEWAY 5

RI4 RI3 RI2 RII RI0 R9
30'R 5'R 7'R 15'R 15'R 80'R

28'

SAWCUT AND MATCH EXISTING
SAWCUT AND MATCH EXISTING
9' SPACING (TYP.)
9' SPACING (TYP.)
SAWCUT AND MATCH EXISTING
4" CONTINUOUS WHITE THERMOPLASTIC PAVEMENT MARKING 18 L.F. (TYP.)

ELEV. = 294.41
ELEV. = 294.24
ELEV. = 294.24

+03.87 -62.86
+05.09 -62.96
+81.92 -62.96
+85.66 -62.67
+89.80 -58.27
+35.00 -57.10
+59.31 -57.46
+61.66 -55.54
+99.70 -58.51
+23.30 -48.96
+63.71 -48.96
+87.79 -41.39
+46.82 -37.88
+62.41 -37.54
+01.69 -39.87
+89.85 -16.50
+97.16 -16.50

0.50%
0.50%
3.03%
1.70%
1.12%
1.89%
3.37%
3.00%
1.26%
2.10%
0.67%
0.67%
2.02%
3.03%
1.70%
1.12%
2.00%
2.00%

R15 R4 R3 R2 R6 R7 R8 R1 R5
2'R 250'R 4'R 15'R 15'R 4'R 260'R 30'R 30'R

20'-0" 36' 20'-0"

4" CONTINUOUS WHITE THERMOPLASTIC PAVEMENT MARKING 18 L.F. (TYP.)
2" MODIFIED CURB AND GUTTER
C.L. DRIVEWAY 5STA. 10+00.00 = C.L. 6TH STREET STA. 47+43.51
℄ = 90°00'00"
C.L. ELSINGER BLVD.
C.L. DRIVEWAY 2
PC 46+25.64
ONLY
10+00
10+00
STOP
STOP

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WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2-10-2016				6	ARK.			
				JOB NO.		080517	19	182
				(2)	SPECIAL DETAILS			

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
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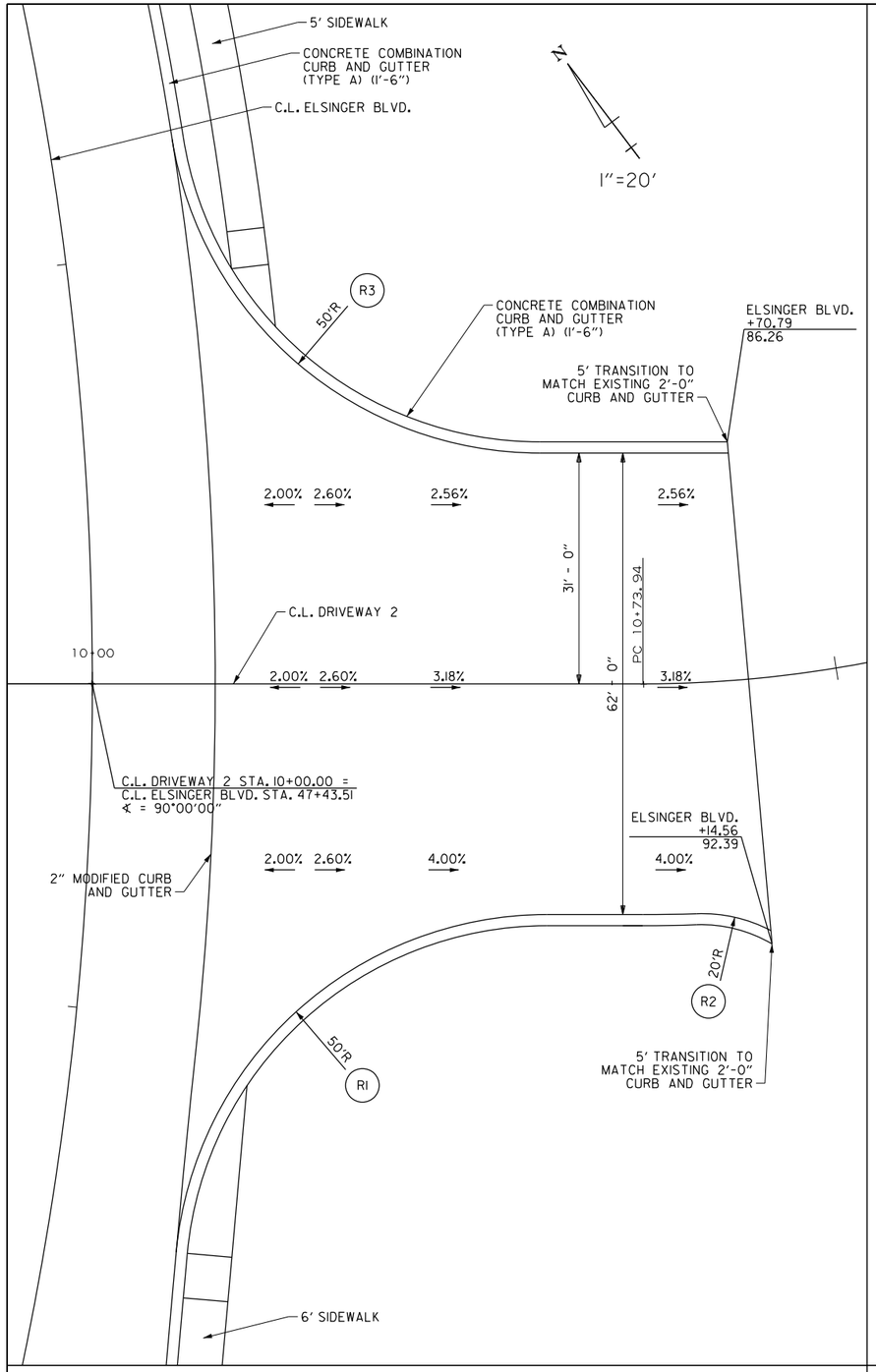
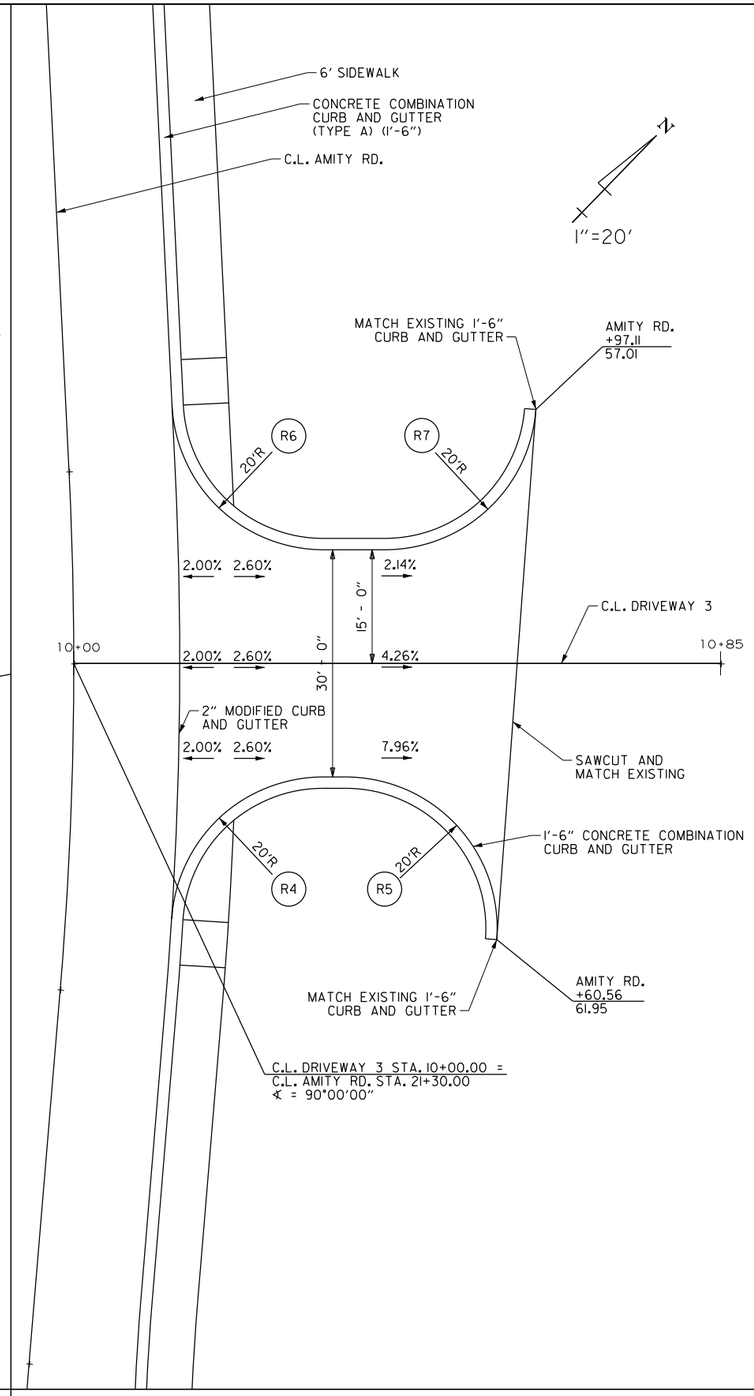
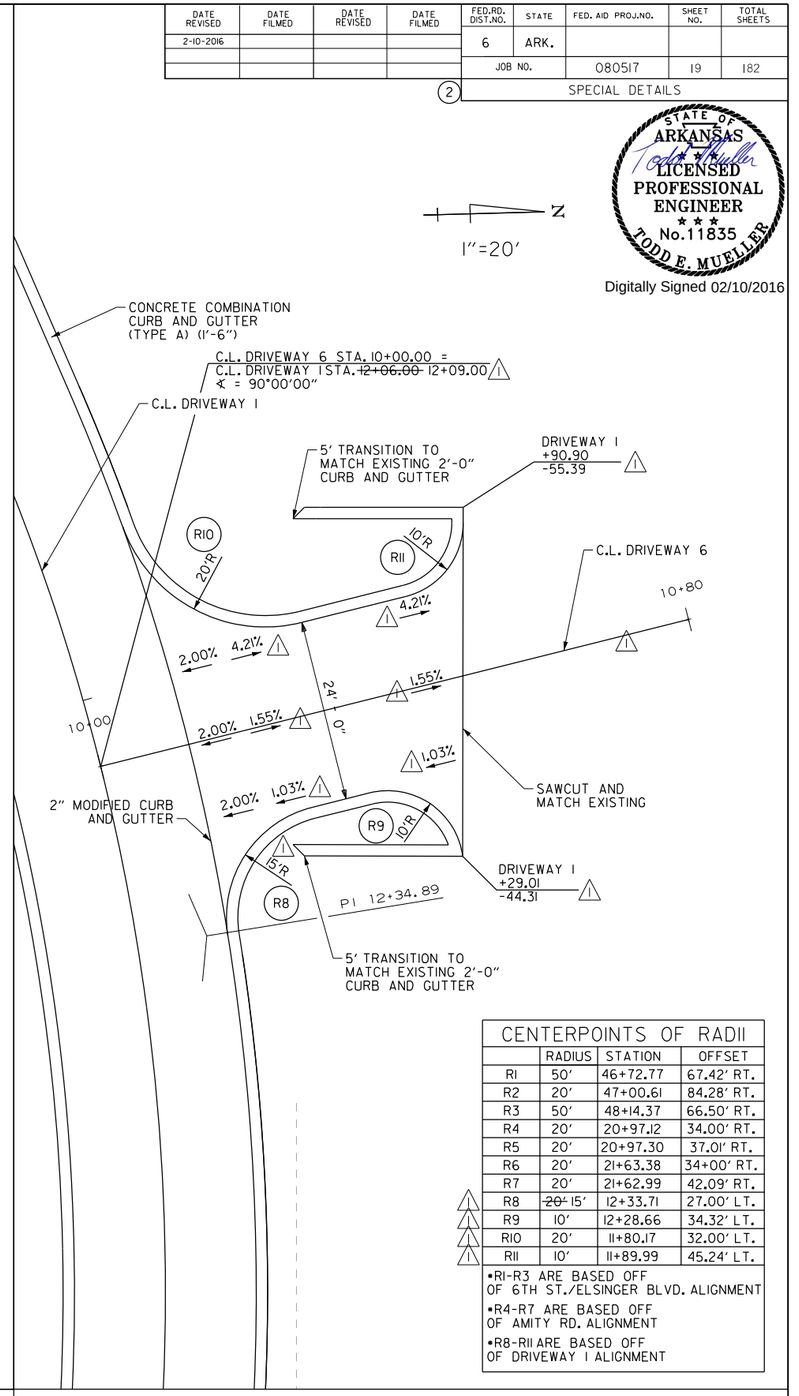


DRIVEWAY 2
ELSINGER BLVD. STA. 47+44



DRIVEWAY 3
AMITY RD. STA. 21+30

DRIVEWAY SPECIAL DETAILS



CENTERPOINTS OF RADII			
	RADIUS	STATION	OFFSET
RI	50'	46+72.77	67.42' RT.
R2	20'	47+00.61	84.28' RT.
R3	50'	48+14.37	66.50' RT.
R4	20'	20+97.12	34.00' RT.
R5	20'	20+97.30	37.01' RT.
R6	20'	21+63.38	34+00' RT.
R7	20'	21+62.99	42.09' RT.
R8	~~20'~~ 15'	12+33.71	27.00' LT.
R9	10'	12+28.66	34.32' LT.
R10	20'	11+80.17	32.00' LT.
R11	10'	11+89.99	45.24' LT.

•RI-R3 ARE BASED OFF OF 6TH ST./ELSINGER BLVD. ALIGNMENT
•R4-R7 ARE BASED OFF OF AMITY RD. ALIGNMENT
•R8-R11 ARE BASED OFF OF DRIVEWAY 1 ALIGNMENT

DRIVEWAY 6
DRIVEWAY 1. STA. 12+06

SPECIAL DETAILS

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REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED
2-10-2016			
9-27-2016			

FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080517	20	182
(2)	SPECIAL DETAILS			

STATE OF ARKANSAS
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CONCRETE PAVED WHEELCHAIR RAMP THROUGH ISLAND MATCHING ASPHALT SURFACE.
6" MIN. THICKNESS CONCRETE WITH 4 - 4'X2' YELLOW TRUNCATED DOME INSERTS

8" MIN. THICKNESS CONCRETE ISLAND
RED TINTED CONCRETE
(2) WITH ~~STAMPED BRICK PATTERN~~ BROOM FINISH

HATCHED AREA DENTOTES PAY LIMIT OF TYPE SPECIAL I WHEELCHAIR RAMP

CONCRETE COMBINATION CURB AND GUTTER (TYPE A) (I'-6")

TYPE B CURB FACE

0.02'/' NOR.*

CROSSWALK WIDTH

0.02'/' NOR.*

VARIES

* MATCH ROADWAY CROSS SLOPE UP TO A MAXIMUM SLOPE OF 12:1

12" MIN. THICKNESS CONCRETE TRUCK APRON
RED TINTED CONCRETE
(2) WITH ~~1/4" DEEP GROVES @ 6" C-C~~ BROOM FINISH

NOTE: SEE AHTD STANDARD DRAWING WR-1 AND DR-1 FOR ADDITIONAL DETAILS AND GENERAL NOTES

NOTE: SEE PLAN SHEETS FOR RADII AND DIMENSIONS

12" MIN. THICKNESS CONCRETE TRUCK APRON
RED TINTED CONCRETE
(2) WITH ~~1/4" DEEP GROVES @ 6" C-C~~ BROOM FINISH

EARTH FILL WITH 6" MIN. TOP SOIL SURFACE SHAPE AND GRADE AS DIRECTED BY ENGINEER

MODEL SPR-V PIPE BOLLARD AS MANUFACTURED BY FAIRWEATHER SITE FURNISHINGS OR APPROVED EQUAL (SCHEDULE 40 PIPE. 18" EMBEDMENT)

2'-6"

24" DIAMETER CONCRETE FOUNDATION

1'-6"

8" DRAINAGE BASE MATERIAL

(1) PIPE BOLLARD DETAIL

NOTE:
PIPE BOLLARD SHALL BE INSTALLED BY MANUFACTURER'S RECOMMENDATIONS.

ROADWAY C.L.

HATCHED AREA DENTOTES PAY LIMIT OF TYPE SPECIAL II WHEELCHAIR RAMP

CONCRETE COMBINATION CURB AND GUTTER (TYPE A) (I'-6")

20% MAX

6'

45° FROM C.L.

GRASS BUFFER VARIES

VARIES

MULTI-USE TRAIL

DETECTABLE WARNING DEVICE

NOTE:
SEE AHTD STANDARD DRAWING WR-1 FOR ADDITIONAL DETAILS

TYPE SPECIAL II BICYCLE RAMP DETAIL

CONCRETE ISLAND
8" NORMAL UNIFORM THICKNESS

6"

TYPE C CURB FACE (TYP. ALL SIDES)

ACHM SURFACE COURSE (TWO 2" LIFTS)

3" ACHM BINDER COURSE

SECTION A-A

CONCRETE TRUCK APRON
12" NORMAL UNIFORM THICKNESS

2"

ACHM SURFACE COURSE (TWO 2" LIFTS)

1/2" RADIUS

EXPANSION JOINT

CONCRETE COMBINATION CURB AND GUTTER (TYPE A) (I'-6")

3" ACHM BINDER COURSE

6" AGGREGATE BASE COURSE (CLASS 7)

SECTION B-B

CONCRETE TRUCK APRON
12" NORMAL UNIFORM THICKNESS

2"

ACHM SURFACE COURSE (TWO 2" LIFTS)

1/2" RADIUS

EXPANSION JOINT

CONCRETE CURB (TYPE D)(7")

3" ACHM BINDER COURSE

6" AGGREGATE BASE COURSE (CLASS 7)

SECTION C-C

NOTES:

1. ALL WHEELCHAIR/BICYCLE RAMPS OF THE TYPE SPECIFIED SHALL BE MEASURED AND PAID FOR AS RAMPS AS SPECIFIED IN SECTION 1-16 - CONCRETE SIDEWALKS AND RAMPS

DETAIL FOR CONCRETE ISLANDS, TYPE SPECIAL I WHEELCHAIR RAMPS, AND TRUCK APRONS

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				6	ARK.			
				JOB NO.		080517	21	182
				(2)	SPECIAL DETAILS			

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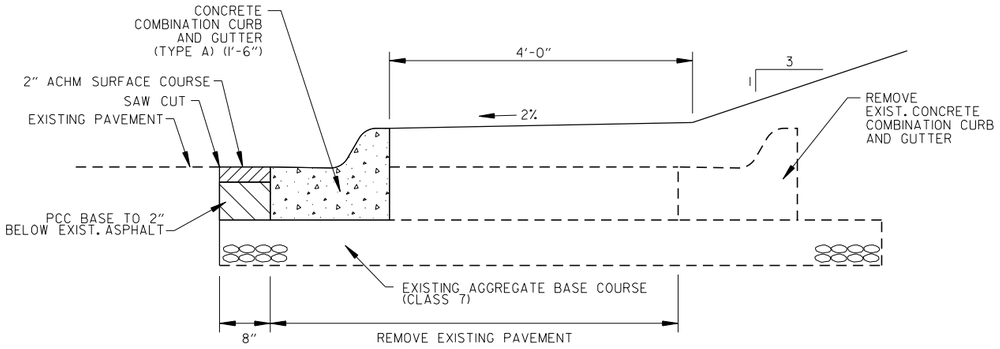
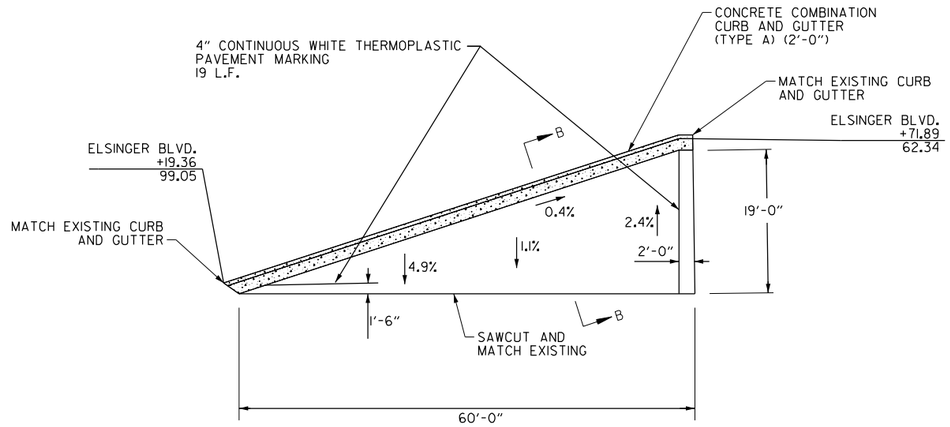
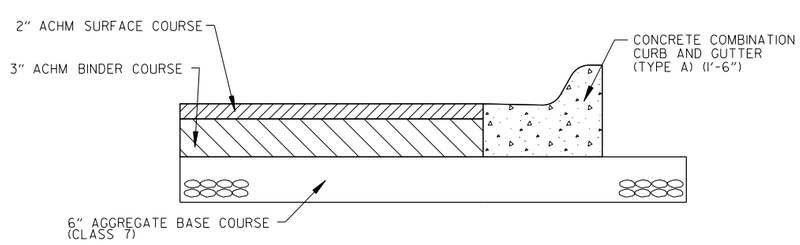


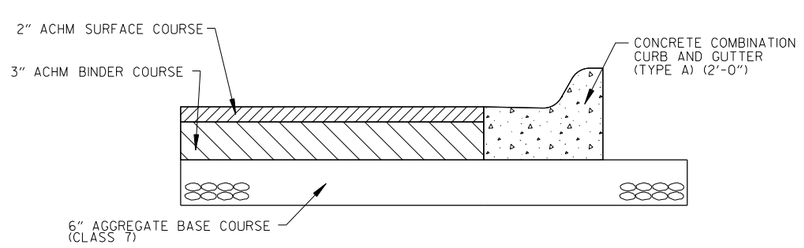
PAVEMENT REPAIR ALONG NEW PARKING LOT CURB



PARKING LOT REPAIR
STA. 44+20 TO STA 44+70 RT.

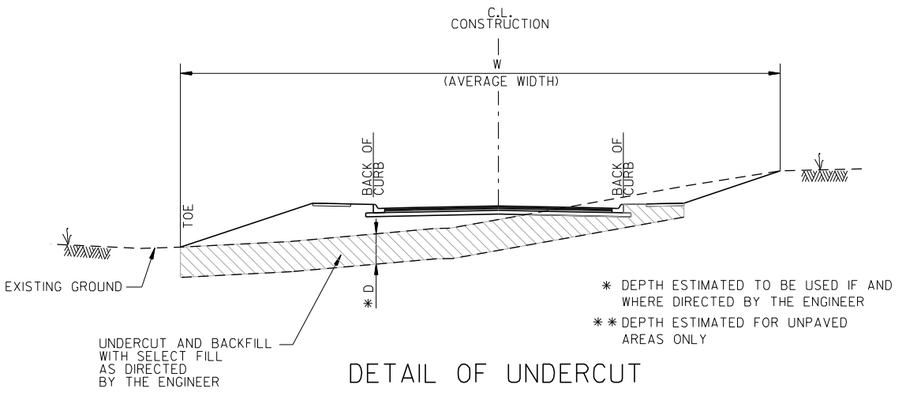


TYPICAL PARKING LOT REPAIR DETAIL



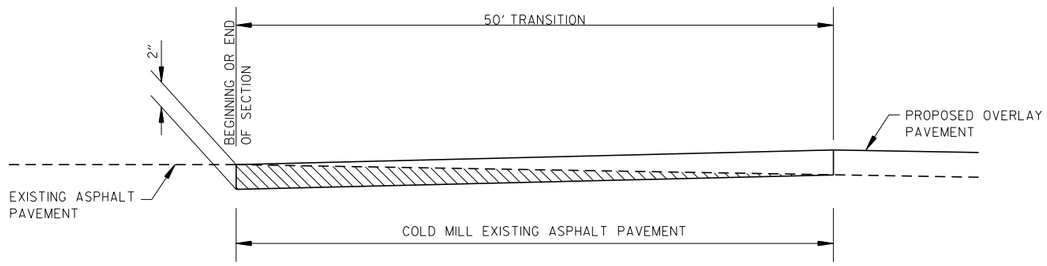
SECTION B-B

PARKING LOT REPAIR DETAILS



DETAIL OF UNDERCUT

6TH ST. STA. 30+30 TO STA. 38+00	D = 4'	W = 175' (AVG)
ELSINGER BLVD. STA. 42+00 TO STA. 48+40	D= 3'**	W = 175' (AVG)
AMITY RD. STA. 10+35 TO STA. 23+45	D= 3'**	W = 175' (AVG)



DETAIL FOR TRANSITIONS

SPECIAL DETAILS

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				6	ARK.			
				JOB NO.		080517	22	182
				(2)	SPECIAL DETAILS			

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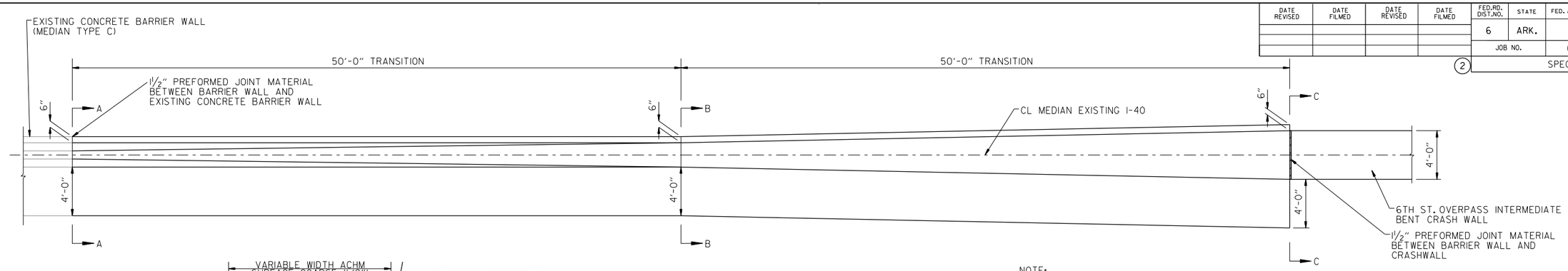
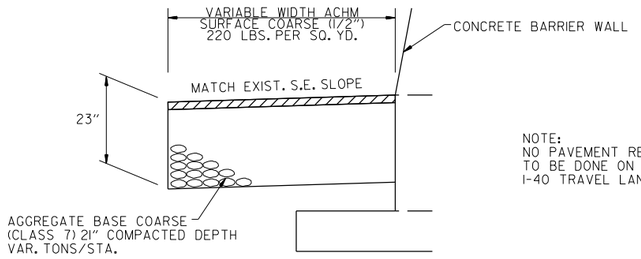


NOTE:
FOR LOCATIONS OF TRANSITIONS, SEE ROADWAY PLANS.

PLAN VIEW
CONCRETE BARRIER WALL (MEDIAN TYPE C) TRANSITION



NOTE:
NO PAVEMENT REPAIR TO BE DONE ON I-40 TRAVEL LANES

INTERSTATE 40 SHOULDER REPAIR FOR CONCRETE BARRIER WALL

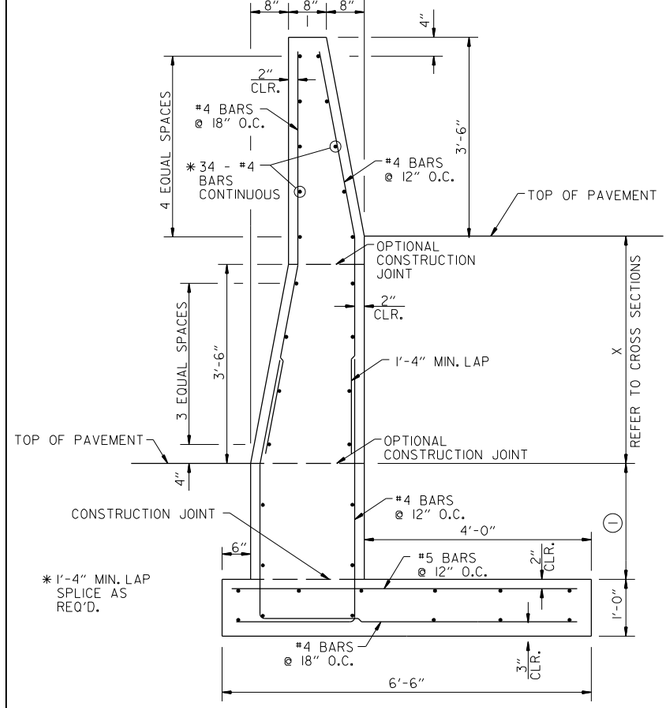
NOTE:
MAINTAIN 3" CLEARANCE ON ALL FOOTING REINFORCEMENT EXCEPT AS NOTED AND 2" CLEARANCE ON ALL OTHER REINFORCEMENT.

GENERAL NOTES

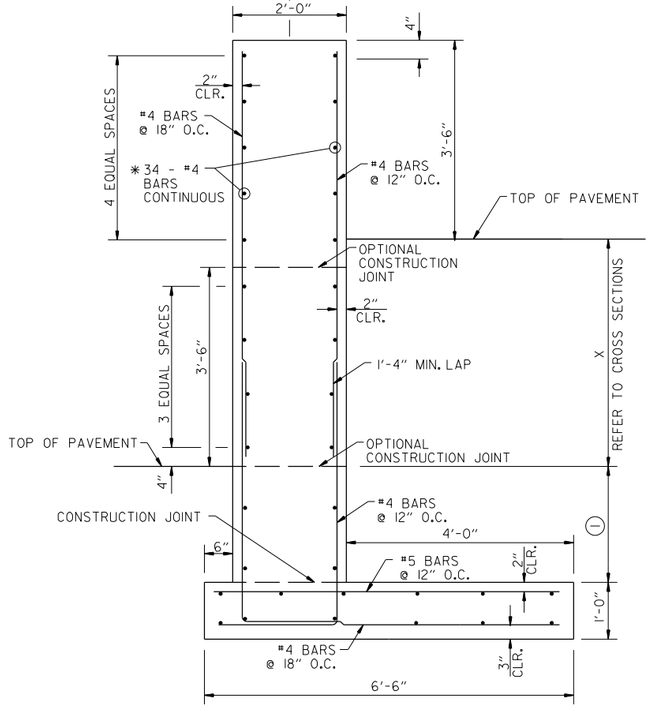
1. ALL BARRIER WALLS SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 631 OF THE STANDARD SPECIFICATIONS, 2014 ED.
2. ALL EXPOSED EDGES SHALL HAVE ¾" CHAMFERS
3. CONTRACTION JOINTS SHALL BE CONSTRUCTED AT 15'-0" MAX. SPACING IN TOP AND SIDES OF MEDIAN BARRIER AND SHALL BE FORMED IN FRESH CONCRETE
4. SHOULDER REPAIR, EXCAVATION AND BACKFILL, AND REMOVAL OF EXISTING BARRIER WALL SHALL NOT BE CONSIDERED FOR SEPARATE PAYMENT BUT SHALL BE INCLUDED IN THE LINEAR FOOT BID FOR THE CONCRETE MEDIAN BARRIER WALL (MEDIAN TYPE SPECIAL)

(1) MATCH DEPTH OF PAVEMENT

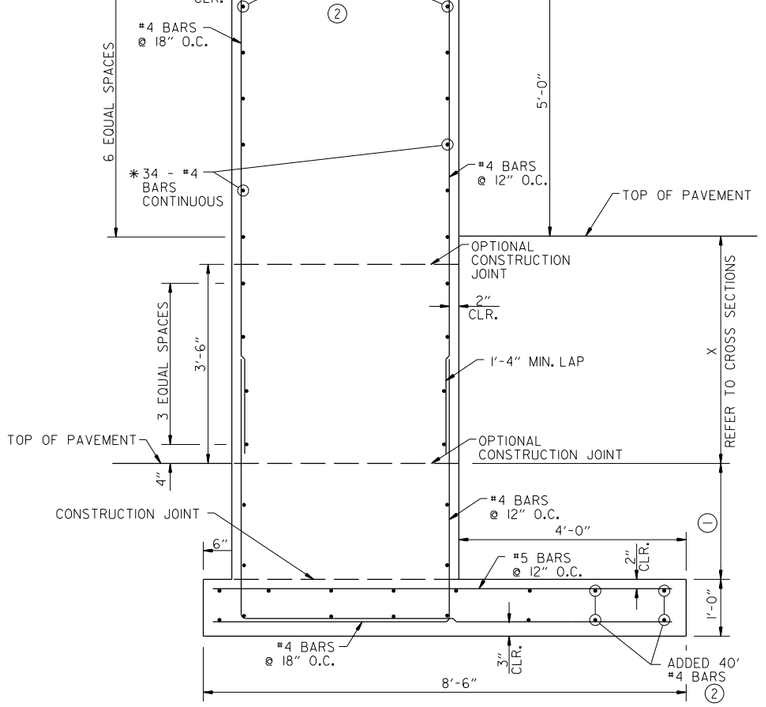
(2) LONG. BARS SHALL BE ADDED IN THE LAST 40' OF THE BARRIER WALL TRANSITION



CONCRETE BARRIER WALL (MEDIAN TYPE SPECIAL) (SECTION A-A)
X = 1'-0" TO 5'-0" MAX.



CONCRETE BARRIER WALL (MEDIAN TYPE SPECIAL) (SECTION B-B)
X = 1'-0" TO 5'-0" MAX.



CONCRETE BARRIER WALL (MEDIAN TYPE SPECIAL) (SECTION C-C)
X = 1'-0" TO 5'-0" MAX.

SPECIAL DETAILS

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2-10-2016				6	ARK.			
				JOB NO.		080517	23	182

(2) TEMPORARY EROSION CONTROL DETAILS

REVISIONS

DATE OF REVISION	REVISION

LEGEND

(E-5) = SAND BAG DITCH CHECK (E-7) = DROP INLET SILT FENCE

(E-6) = ROCK DITCH CHECK (E-11) = SILT FENCE

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

STA. 48+40.00
END JOB 080517

N

1"=120'

C.L. EXIST. ELSINGER BLVD.

STORMWATER DISCHARGE POINT

STA. 23+45.00
END AMITY RD.

CONSTRUCTION ENTRANCE/EXIT

C.L. EXIST. AMITY RD.

CONCRETE WASH-OUT AREA

C.L. AMITY RD. CONNECTION

SOIL DISTURBANCE AREA

C.L. AMITY RD. DETOUR

MAIN CONSTRUCTION ENTRANCE/EXIT

C.L. I-40 MEDIAN

INTERMITTENT STREAM

STA. 10+35.00
BEGIN AMITY RD.

AMITY RD.

SILT FENCE	(E-11)	LIN. FT.
STA. 9+85 TO STA. 13+65	RT.	495
STA. 21+63 TO STA. 23+54	LT.	200

SAND BAG DITCH CHECK	(E-5)	INSTALLATION
STA. 12+45	LT.	I
STA. 14+18	RT.	I
STA. 17+37	LT.	I

ROCK DITCH CHECK	(E-6)	INSTALLATION
STA. 13+78	RT.	I
STA. 14+20	LT.	I
STA. 15+51	LT.	I
STA. 20+67	LT.	I

DROP INLET SILT FENCE	(E-7)	LIN. FT.
STA. 21+78	LT.	I
STA. 21+78	RT.	I

AMITY RD. DETOUR

SAND BAG DITCH CHECK	(E-5)	INSTALLATION
STA. 15+98	LT.	I
STA. 20+00	LT.	I
STA. 23+26	RT.	I
STA. 24+03	LT.	I

ROCK DITCH CHECK	(E-6)	INSTALLATION
STA. 12+98	LT.	I
STA. 17+95	LT.	I
STA. 25+17	LT.	I

ELSINGER BLVD.

DROP INLET SILT FENCE	(E-7)	LIN. FT.
~~STA. 45+93~~	~~LT.~~	~~20~~
~~STA. 46+62~~	~~RT.~~	~~20~~
~~STA. 46+98~~	~~LT.~~	~~20~~
~~STA. 48+12~~	~~RT.~~	~~20~~
~~STA. 48+23~~	~~RT.~~	~~20~~
~~STA. 48+23~~	~~LT.~~	~~20~~

STATE OF ARKANSAS
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TERMPORARY EROSION CONTROL DETAILS STAGE I

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2-10-2016				6	ARK.			
				JOB NO.		080517	24	182

(2) TEMPORARY EROSION CONTROL DETAILS

REVISIONS

DATE OF REVISION	REVISION

LEGEND

(E-5) = SAND BAG DITCH CHECK [E-7] = DROP INLET SILT FENCE

(E-6) = ROCK DITCH CHECK (E-11) = SILT FENCE

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

STA. 48+40.00
END JOB 080517

1"=120'

STA. 23+45.00
END AMITY RD.

C.L. AMITY RD.

EXIST. ELSINGER BLVD.

C.L. DRIVEWAY

C.L. TEMPORARY DRIVEWAY

EXIST. AMITY RD.

C.L. AMITY RD. DETOUR

C.L. I-40 MEDIAN

STA. 10+35.00
BEGIN AMITY RD.

7200+00

7205+00

7210+00

AMITY RD.

SILT FENCE	(E-11)	LIN. FT.
STA. 9+85 TO STA. 13+65	RT.	RETAIN
STA. 21+63 TO STA. 23+54	LT.	RETAIN
SAND BAG DITCH CHECK	(E-5)	INSTALLATION
STA. 17+37	LT.	RETAIN
ROCK DITCH CHECK	(E-6)	INSTALLATION
STA. 13+78	RT.	RETAIN
STA. 14+20	LT.	RETAIN
STA. 20+67	LT.	RETAIN
DROP INLET SILT FENCE	[E-7]	LIN. FT.
STA. 22+28	LT.	RETAIN
STA. 22+28	RT.	RETAIN

AMITY RD. DETOUR

SILT FENCE	(E-11)	LIN. FT.
STA. 13+74 TO STA. 14+87	RT.	115
STA. 15+38 TO STA. 16+68	RT.	140
SAND BAG DITCH CHECK	(E-5)	INSTALLATION
STA. 15+98	LT.	RETAIN
STA. 20+00	LT.	RETAIN
STA. 23+26	RT.	RETAIN
STA. 24+03	LT.	RETAIN
ROCK DITCH CHECK	(E-6)	INSTALLATION
STA. 12+98	LT.	RETAIN
STA. 17+95	LT.	RETAIN
STA. 25+17	LT.	RETAIN

TEMP. DRIVEWAY

SILT FENCE	(E-11)	LIN. FT.
STA. 9+11 TO STA. 10+64	RT.	155
STA. 9+07 TO STA. 13+43	LT.	450
STA. 12+00 TO STA. 13+48	RT.	145
ROCK DITCH CHECK	(E-6)	INSTALLATION
STA. 13+32	RT.	1
STA. 13+58	RT.	1
DROP INLET SILT FENCE	[E-7]	LIN. FT.
⚠1 STA. 11+37	LT.	20
STA. ~~13+50~~ 13+45 ⚠1	LT.	20
STA. ~~13+50~~ 13+45 ⚠1	RT.	20

ELSINGER BLVD.

DROP INLET SILT FENCE	[E-7]	LIN. FT.
~~STA. 45+93~~	~~LT.~~	~~RETAIN~~
~~STA. 46+62~~	~~RT.~~	~~RETAIN~~
⚠1 ~~STA. 46+38~~	~~LT.~~	~~RETAIN~~
STA. 48+12	RT.	RETAIN
STA. 48+23	RT.	RETAIN
STA. 48+23	LT.	RETAIN

STATE OF ARKANSAS
Todd E Mueller
LICENSED PROFESSIONAL ENGINEER
No.11835
TODD E. MUELLER
Digitally Signed 02/10/2016

TEMPORARY EROSION CONTROL DETAILS STAGE 2

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WORKSPACE: AHTD
L:\2012\20171590 - Cantrell Field Access\Drawings\6TH_ST\6TH_EC_PRJ2_STG2_6TH_01.dgn
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080517	25	182

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.11835
TODD E. MUELLER
Digitally Signed 05/20/2015

C.L. I-40 MEDIAN

7195+00 7200+00 7205+00

22.0% 20.8% 10.0%

CONSTRUCTION ENTRANCE/EXIT

INTERMITTENT STREAM

CONCRETE WASH-OUT AREA

E-II +43 E-II +42

E-7 E-5

35.00

SOIL DISTURBANCE AREA

STA. 30+30.00
BEGIN JOB 080517

E-II +30 E-7 30.00 E-II +30

C.L. 6TH STREET

MAIN CONSTRUCTION ENTRANCE/EXIT

25.00

1"=120'

REVISIONS

DATE OF REVISION	REVISION

LEGEND

(E-5) = SAND BAG DITCH CHECK [E-7] = DROP INLET SILT FENCE
(E-6) = ROCK DITCH CHECK (E-II) = SILT FENCE

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

6TH STREET

SILT FENCE	(E-II)	LIN. FT.
STA. 30+30 TO STA. 38+42	RT.	865
STA. 30+30 TO STA. 37+43	LT.	690

DROP INLET SILT FENCE	[E-7]	LIN. FT.
STA. 30+30	LT.	20
STA. 32+00	RT.	20
STA. 32+00	LT.	20
STA. 33+00	LT.	20
STA. 36+00	RT.	20
STA. 36+00	LT.	20

SAND BAG DITCH CHECK	(E-5)	INSTALLATION
STA. 36+00	RT.	1

TEMPORARY EROSION CONTROL DETAILS STAGE 2

rccorbyn 5/20/2015 7:13:06 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED
2-10-2016			

FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080517	26	182

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
Todd E Mueller
LICENSED PROFESSIONAL ENGINEER
No.11835
TODD E. MUELLER
Digitally Signed 02/10/2016

REVISIONS

DATE OF REVISION	REVISION

LEGEND

(E-5) = SAND BAG DITCH CHECK [E-7] = DROP INLET SILT FENCE
(E-6) = ROCK DITCH CHECK (E-11) = SILT FENCE

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

I-40 MEDIAN

DROP INLET SILT FENCE	[E-7]	LIN. FT.
STA. 7206+42	LT.	20
STA. 7206+42	RT.	20

STA. 48+40.00
END JOB 080517

N

1"=120'

C.L. ELSINGER BLVD.

STA. 23+45.00
END AMITY RD.

C.L. AMITY RD.

C.L. AMITY RD. CONNECTION

C.L. TEMP. AMITY RD. CONNECTION

C.L. AMITY RD. DETOUR

C.L. I-40 MEDIAN

C.L. DRIVEWAY 1

C.L. TEMPORARY DRIVEWAY

EXIST. ELSINGER BLVD.

C.L. 6TH STREET

STA. 10+35.00
BEGIN AMITY RD.

AMITY RD.

SILT FENCE	(E-11)	LIN. FT.
STA. 9+85 TO STA. 13+65	RT.	RETAIN
STA. 18+00 TO STA. 21+13	RT.	310
STA. 21+63 TO STA. 22+28	LT.	75
STA. 22+61 TO STA. 23+54	LT.	95

SAND BAG DITCH CHECK	(E-5)	INSTALLATION
STA. 17+37	LT.	RETAIN

ROCK DITCH CHECK	(E-6)	INSTALLATION
STA. 13+78	RT.	RETAIN

DROP INLET SILT FENCE	[E-7]	LIN. FT.
STA. 18+00	RT.	20
STA. 19+00	LT.	20
STA. 19+00	RT.	20
STA. 19+12	RT.	20
⚠1 STA. 19+15	LT.	20
STA. 19+44	RT.	20
STA. 20+50	RT.	20
STA. 22+08	LT.	20
STA. 22+30	RT.	20
STA. 22+80	LT.	20
STA. 22+80	RT.	20

AMITY RD. DETOUR

SILT FENCE	(E-11)	LIN. FT.
STA. 13+74 TO STA. 14+87	RT.	RETAIN
STA. 15+38 TO STA. 16+68	RT.	RETAIN

SAND BAG DITCH CHECK	(E-5)	INSTALLATION
STA. 15+98	LT.	RETAIN
STA. 20+00	LT.	RETAIN
STA. 23+26	RT.	RETAIN
STA. 24+03	LT.	RETAIN

ROCK DITCH CHECK	(E-6)	INSTALLATION
STA. 12+98	LT.	RETAIN
STA. 17+95	LT.	RETAIN
STA. 25+17	LT.	RETAIN

TEMP. DRIVEWAY

SILT FENCE	(E-11)	LIN. FT.
STA. 9+11 TO STA. 10+64	RT.	RETAIN
STA. 9+07 TO STA. 13+43	LT.	RETAIN
STA. 12+00 TO STA. 13+48	RT.	RETAIN

ROCK DITCH CHECK	(E-6)	INSTALLATION
STA. 13+32	RT.	RETAIN
STA. 13+58	RT.	RETAIN

DROP INLET SILT FENCE	[E-7]	LIN. FT.
⚠1 STA. 11+37	LT.	RETAIN
STA. ~~13+50~~ 13+45 ⚠1	LT.	RETAIN
STA. ~~13+50~~ 13+45 ⚠1	RT.	RETAIN

ELSINGER BLVD.

DROP INLET SILT FENCE	[E-7]	LIN. FT.
STA. 45+93	LT.	20
STA. 46+62	RT.	20
STA. 46+98	LT.	20 ⚠1
STA. 48+12	RT.	20
STA. 48+23	RT.	20
STA. 48+23	LT.	20

SILT FENCE	(E-11)	LIN. FT.
STA. 46+00 TO STA. 47+10	LT.	125

TEMPORARY EROSION CONTROL DETAILS STAGE 3

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WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2-10-2016				6	ARK.			
				JOB NO.		080517	27	182

TEMPORARY EROSION CONTROL DETAILS

6TH STREET

DROP INLET SILT FEENCE	E-7	LIN. FT.
STA. 42+50	RT.	20

I-40 MEDIAN

DROP INLET SILT FENCE	E-7	LIN. FT.
STA. 7206+42	LT.	RETAIN
STA. 7206+42	RT.	RETAIN

AMITY RD.

SILT FENCE	E-11	LIN. FT.
STA. 9+85 TO STA. 13+65	RT.	RETAIN
STA. 18+00 TO STA. 21+13	RT.	RETAIN
STA. 21+63 TO STA. 22+28	LT.	RETAIN
STA. 22+61 TO STA. 23+54	LT.	RETAIN
ROCK DITCH CHECK	E-6	INSTALLATION
STA. 13+78	RT.	RETAIN
STA. 14+52	RT.	I
DROP INLET SILT FENCE	E-7	LIN. FT.
STA. 14+75	RT.	20
STA. 15+50	RT.	20
STA. 15+50	LT.	20
STA. 18+00	RT.	RETAIN
STA. 19+00	LT.	RETAIN
STA. 19+00	RT.	RETAIN
STA. 19+12	RT.	RETAIN
1 STA. 19+15	LT.	RETAIN
STA. 19+44	RT.	RETAIN
STA. 20+50	RT.	RETAIN
STA. 22+08	LT.	RETAIN
STA. 22+30	RT.	RETAIN
STA. 22+80	LT.	RETAIN
STA. 22+80	RT.	RETAIN

AMITY RD. DETOUR

SILT FENCE	E-11	LIN. FT.
STA. 13+74 TO STA. 14+87	RT.	RETAIN
SAND BAG DITCH CHECK	E-5	INSTALLATION
STA. 15+98	RT.	I
STA. 15+98	LT.	RETAIN
STA. 20+00	LT.	RETAIN
STA. 23+26	RT.	RETAIN
STA. 24+03	LT.	RETAIN
ROCK DITCH CHECK	E-6	INSTALLATION
STA. 12+98	LT.	RETAIN
STA. 17+95	LT.	RETAIN
STA. 25+17	LT.	RETAIN

TEMP. DRIVEWAY

SILT FENCE	E-11	LIN. FT.
STA. 9+11 TO STA. 10+64	RT.	RETAIN
STA. 11+20 TO STA. 13+43	LT.	RETAIN
STA. 12+00 TO STA. 13+48	RT.	RETAIN
DROP INLET SILT FENCE	E-7	LIN. FT.
1 STA. 11+37	LT.	RETAIN
STA. ~~13+50~~ 13+45 1	LT.	RETAIN
STA. ~~13+50~~ 13+45 1	RT.	RETAIN
ROCK DITCH CHECK	E-6	INSTALLATION
STA. 13+32	RT.	RETAIN
STA. 13+58	RT.	RETAIN

ELSINGER BLVD.

DROP INLET SILT FENCE	E-7	LIN. FT.
STA. 43+93	CL.	20
STA. 44+06	RT.	20
STA. 44+06	LT.	20
STA. 44+35	LT.	20
STA. 44+38	CL.	20
STA. 44+42	LT.	20
STA. 45+52	RT.	20
STA. 45+52	LT.	20
STA. 45+93	LT.	RETAIN
STA. 46+62	RT.	RETAIN
STA. 46+98	LT.	RETAIN
STA. 48+12	RT.	RETAIN
STA. 48+23	RT.	RETAIN
STA. 48+23	LT.	RETAIN
SILT FENCE	E-11	LIN. FT.
STA. 43+40 TO STA. 46+00	LT.	275
STA. 46+00 TO STA. 47+10	LT.	RETAIN

STATE OF ARKANSAS
Todd E. Mueller
LICENSED PROFESSIONAL ENGINEER
No.11835
TODD E. MUELLER
Digitally Signed 02/10/2016

REVISIONS

DATE OF REVISION	REVISION

LEGEND

E-5 = SAND BAG DITCH CHECK E-7 = DROP INLET SILT FENCE
E-6 = ROCK DITCH CHECK E-11 = SILT FENCE

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

STA. 23+45.00
END AMITY RD.

STA. 48+40.00
END JOB 080517

1"=120'

C.L. ELSINGER BLVD.

C.L. DRIVEWAY 1

C.L. TEMPORARY DRIVEWAY

C.L. AMITY RD.

C.L. AMITY RD. DETOUR

C.L. I-40 MEDIAN

C.L. 6TH ST.

STA. 10+35.00
BEGIN AMITY RD.

TEMPORARY EROSION CONTROL DETAILS STAGE 4

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WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2-10-2016				6	ARK.			
				JOB NO.		080517	28	182

(2) TEMPORARY EROSION CONTROL DETAILS

6TH STREET

DROP INLET SILT FENCE	E-7	LIN. FT.
STA. 42+50	RT.	RETAIN

I-40 MEDIAN

DROP INLET SILT FENCE	E-7	LIN. FT.
STA. 7206+42	LT.	RETAIN
STA. 7206+42	RT.	RETAIN

DRIVEWAY 1

SILT FENCE	E-11	LIN. FT.
STA. 11+01 TO STA. 12+00	RT.	95
STA. 11+22 TO STA. 11+83	LT.	80
STA. 12+00 TO STA. 13+48	RT.	RETAIN
STA. 12+26 TO STA. 13+43	LT.	RETAIN

DROP INLET SILT FENCE	E-7	LIN. FT.
1 STA. 11+37	LT.	RETAIN
STA. ~~13+50~~ 13+45 1	LT.	RETAIN
STA. ~~13+50~~ 13+45 1	RT.	RETAIN

ROCK DITCH CHECK	E-6	INSTALLATION
STA. 13+32	RT.	RETAIN
STA. 13+58	RT.	RETAIN

AMITY RD. DETOUR

SAND BAG DITCH CHECK	E-5	INSTALLATION
STA. 15+98	RT.	RETAIN
STA. 15+98	LT.	RETAIN
STA. 20+00	LT.	RETAIN
STA. 23+26	RT.	RETAIN
STA. 24+03	LT.	RETAIN

ROCK DITCH CHECK	E-6	INSTALLATION
STA. 12+98	LT.	RETAIN
STA. 17+95	LT.	RETAIN
STA. 25+17	LT.	RETAIN

STATE OF ARKANSAS
Todd E Mueller
LICENSED PROFESSIONAL ENGINEER
No.11835
TODD E. MUELLER
Digitally Signed 02/10/2016

REVISIONS

DATE OF REVISION	REVISION

LEGEND

E-5 = SAND BAG DITCH CHECK E-7 = DROP INLET SILT FENCE
E-6 = ROCK DITCH CHECK E-11 = SILT FENCE

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

STA. 48+40.00
END JOB 080517

1"=120'

C.L. ELSINGER BLVD.

C.L. DRIVEWAY 1

STA. 23+45.00
END AMITY RD.

C.L. AMITY RD.

1 C.L. AMITY CONNECTION

~~1 C.L. AMITY CONNECTION~~

C.L. AMITY RD. DETOUR

C.L. I-40 MEDIAN

C.L. 6TH ST.

STA. 10+35.00
BEGIN AMITY RD.

AMITY RD.

SILT FENCE	E-11	LIN. FT.
STA. 9+85 TO STA. 13+65	RT.	RETAIN
STA. 18+00 TO STA. 21+13	RT.	RETAIN
STA. 21+63 TO STA. 22+28	LT.	RETAIN
STA. 22+61 TO STA. 23+54	LT.	RETAIN

SAND BAG DITCH CHECK	E-5	INSTALLATION
STA. 12+90	LT.	1

DROP INLET SILT FENCE	E-7	LIN. FT.
STA. 10+46	LT.	20
STA. 10+46	RT.	20
1 STA. ~~11+00~~ 10+75	LT.	20
1 STA. ~~11+00~~ 10+77	RT.	20
STA. 12+00	LT.	20
STA. 12+00	RT.	20
STA. 14+82	RT.	20
STA. 14+75	RT.	RETAIN
STA. 15+50	RT.	RETAIN
STA. 15+50	LT.	RETAIN
STA. 18+00	RT.	RETAIN
STA. 19+00	LT.	RETAIN
STA. 19+00	RT.	RETAIN
STA. 19+12	RT.	RETAIN
1 STA. 19+15	LT.	RETAIN
STA. 19+44	RT.	RETAIN
STA. 20+50	RT.	RETAIN
STA. 22+08	RT.	RETAIN
STA. 22+30	RT.	RETAIN
STA. 22+80	LT.	RETAIN
STA. 22+80	RT.	RETAIN

ELSINGER BLVD.

DROP INLET SILT FENCE	E-7	LIN. FT.
STA. 43+93	CL.	RETAIN
STA. 44+06	RT.	RETAIN
STA. 44+06	LT.	RETAIN
STA. 44+35	LT.	RETAIN
STA. 44+38	CL.	RETAIN
STA. 44+42	LT.	RETAIN
STA. 45+52	RT.	RETAIN
STA. 45+52	LT.	RETAIN
STA. 45+93	LT.	RETAIN
STA. 46+62	RT.	RETAIN
STA. 46+98	LT.	RETAIN
STA. 48+12	RT.	RETAIN
STA. 48+23	RT.	RETAIN
STA. 48+23	LT.	RETAIN

SILT FENCE	E-11	LIN. FT.
STA. 43+40 TO STA. 47+10	LT.	RETAIN

TEMPORARY EROSION CONTROL DETAILS STAGE 5

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WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2-10-2016				6	ARK.			
				JOB NO.		080517	29	182

(2) TEMPORARY EROSION CONTROL DETAILS

6TH STREET

DROP INLET SILT FIXTURE	E-7	LIN. FT.
STA. 41+50	LT.	20
STA. 41+50	RT.	20
STA. 41+95	LT.	20
STA. 42+50	RT.	RETAIN

I-40 MEDIAN

DROP INLET SILT FENCE	E-7	LIN. FT.
STA. 7206+42	LT.	RETAIN
STA. 7206+42	RT.	RETAIN

DRIVEWAY 1

SILT FENCE	E-11	LIN. FT.
STA. 11+01 TO STA. 12+00	RT.	RETAIN
STA. 11+22 TO STA. 11+83	LT.	RETAIN
STA. 12+00 TO STA. 13+48	RT.	RETAIN
STA. 12+26 TO STA. 13+43	LT.	RETAIN

DROP INLET SILT FENCE	E-7	LIN. FT.
1 STA. 11+37	LT.	RETAIN
STA. ~~13+50~~ 13+45 1	LT.	RETAIN
STA. ~~13+50~~ 13+45 1	RT.	RETAIN

ROCK DITCH CHECK	E-6	INSTALLATION
STA. 13+32	RT.	RETAIN
STA. 13+58	RT.	RETAIN

AMITY RD. DETOUR

SAND BAG DITCH CHECK	E-5	INSTALLATION
STA. 15+98	RT.	RETAIN
STA. 15+98	LT.	RETAIN
STA. 20+00	LT.	RETAIN
STA. 23+26	RT.	RETAIN
STA. 24+03	LT.	RETAIN

ROCK DITCH CHECK	E-6	INSTALLATION
STA. 12+98	LT.	RETAIN
STA. 25+17	LT.	RETAIN

STATE OF ARKANSAS
Todd E Mueller
LICENSED PROFESSIONAL ENGINEER
No.11835
TODD E. MUELLER
Digitally Signed 02/10/2016

REVISIONS

DATE OF REVISION	REVISION

LEGEND

E-5 = SAND BAG DITCH CHECK E-7 = DROP INLET SILT FENCE
E-6 = ROCK DITCH CHECK E-11 = SILT FENCE

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

STA. 23+45.00
END AMITY RD.

STA. 48+40.00
END JOB 080517

1"=120'

C.L. ELSINGER BLVD.

C.L. AMITY RD.

C.L. I-40 MEDIAN

C.L. 6TH STREET

C.L. DRIVEWAY 1

7200+00

7205+00

7210+00

STA. 10+35.00
BEGIN AMITY RD.

AMITY RD.

SILT FENCE	E-11	LIN. FT.
STA. 9+85 TO STA. 13+65	RT.	RETAIN
STA. 14+62 TO STA. 15+73	LT.	175
STA. 18+00 TO STA. 21+13	RT.	RETAIN
STA. 21+63 TO STA. 22+28	LT.	RETAIN
STA. 22+61 TO STA. 23+54	LT.	RETAIN

SAND BAG DITCH CHECK	E-5	INSTALLATION
STA. 12+90	LT.	RETAIN

DROP INLET SILT FENCE	E-7	LIN. FT.
STA. 10+46	LT.	RETAIN
STA. 10+46	RT.	RETAIN
1 STA. ~~11+00~~ 10+75	LT.	RETAIN
1 STA. ~~11+00~~ 10+77	RT.	RETAIN
STA. 12+00	LT.	RETAIN
STA. 12+00	RT.	RETAIN
STA. 14+82	RT.	RETAIN
STA. 14+75	RT.	RETAIN
STA. 15+50	RT.	RETAIN
STA. 15+50	LT.	RETAIN
STA. 18+00	RT.	RETAIN
STA. 19+00	LT.	RETAIN
STA. 19+00	RT.	RETAIN
STA. 19+12	RT.	RETAIN
1 STA. 19+15	LT.	RETAIN
STA. 19+44	RT.	RETAIN
STA. 20+50	RT.	RETAIN
STA. 22+08	RT.	RETAIN
STA. 22+30	RT.	RETAIN
STA. 22+80	LT.	RETAIN
STA. 22+80	RT.	RETAIN

ELSINGER BLVD.

DROP INLET SILT FENCE	E-7	LIN. FT.
STA. 43+93	CL.	RETAIN
STA. 44+06	RT.	RETAIN
STA. 44+06	LT.	RETAIN
STA. 44+35	LT.	RETAIN
STA. 44+38	CL.	RETAIN
STA. 44+42	LT.	RETAIN
STA. 45+52	RT.	RETAIN
STA. 45+52	LT.	RETAIN
STA. 45+93	LT.	RETAIN
STA. 46+62	RT.	RETAIN
STA. 46+98	LT.	RETAIN
STA. 48+12	RT.	RETAIN
STA. 48+23	RT.	RETAIN
STA. 48+23	LT.	RETAIN

SILT FENCE	E-11	LIN. FT.
STA. 43+40 TO STA. 47+10	LT.	RETAIN

TEMPORARY EROSION CONTROL DETAILS STAGE 6

rccorbyn 2/10/2016 4:33:55 PM
WORKSPACE: AHTD
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REVISED DATE:

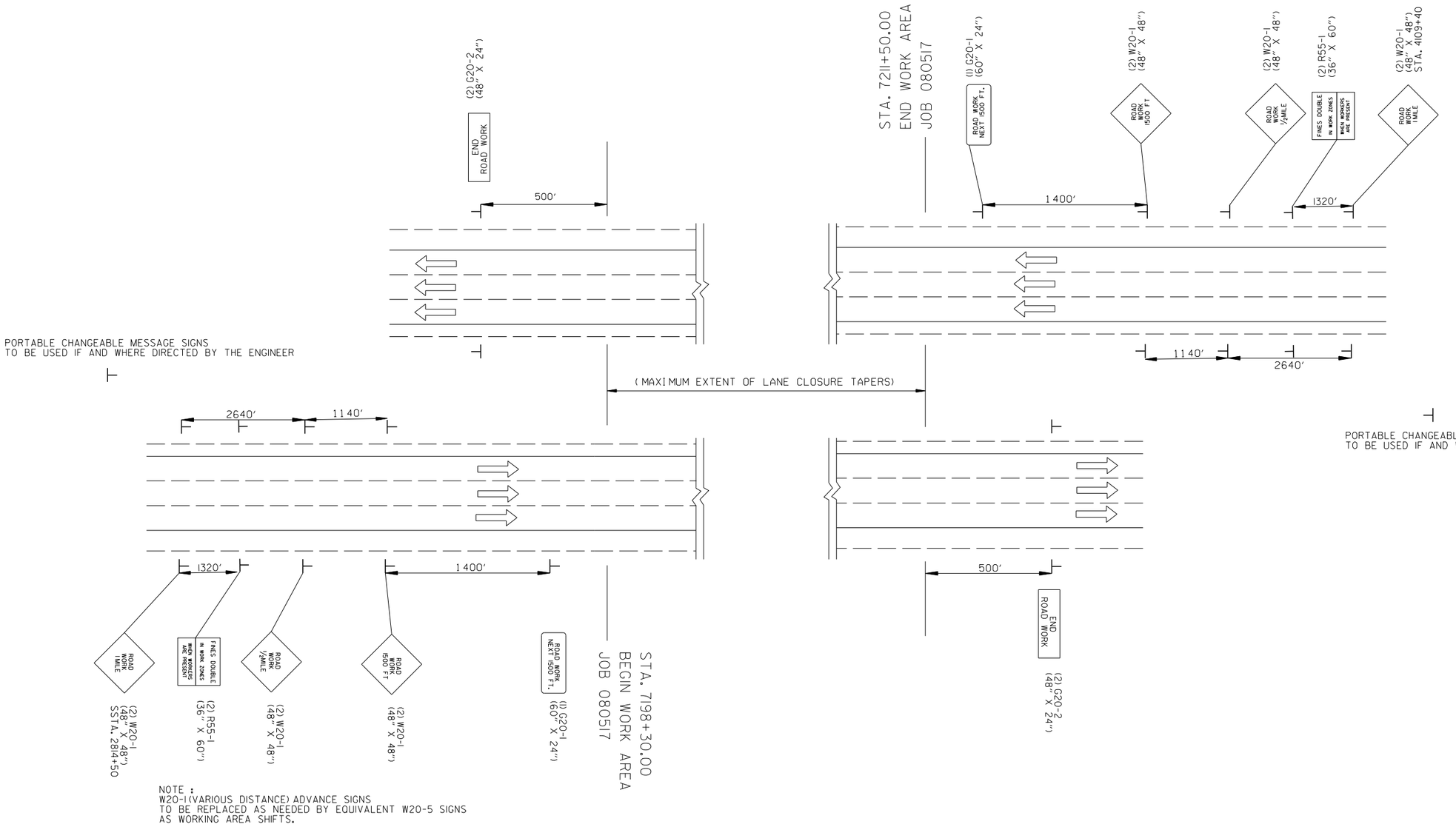
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080517	30	182

(2) MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.11835
TODD E. MUELLER
Digitally Signed 05/20/2015

NOTE :
W20-1 (VARIOUS DISTANCE) ADVANCE SIGNS
TO BE REPLACED AS NEEDED BY EQUIVALENT W20-5 SIGNS
AS WORKING AREA SHIFTS.



NOTE :
W20-1 (VARIOUS DISTANCE) ADVANCE SIGNS
TO BE REPLACED AS NEEDED BY EQUIVALENT W20-5 SIGNS
AS WORKING AREA SHIFTS.

ADVANCE SIGNS AT BEGINNING AND END OF JOB ALL STAGES

MAINTENANCE OF TRAFFIC DETAILS
ADVANCE SIGNS AT JOB ENDS

rocorbyn 5/20/2015 7:13:09 AM
WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED
2-10-2016			

FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080517	31	182

(2) MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.11835
TODD E. MUELLER
Digitally Signed 02/10/2016

STAGE I
CONSTRUCTION SEQUENCE NOTES

1. MAINTAIN TRAFFIC ON EXISTING AMITY RD., AND AMITY RD. DETOUR EAST.
2. CONSTRUCT AMITY RD. DETOUR AND ~~ELSINGER BLVD. STA. 46+00 TO STA. 48+40~~ AMITY RD. CONNECTION AS SHOWN ON THE PLANS. (1)
3. PLACE CONSTRUCTION PAVEMENT MARKINGS AND REMOVABLE CONSTRUCTION PAVEMENT MARKINGS SHOWN FOR STAGE 2 TRAFFIC CONFIGURATION.

TRAFFIC DRUMS @ 30' O.C. = 6 EACH
AMITY RD. STA. 24+60 TO STA. 26+00

TRAFFIC DRUMS @ 30' O.C. = 6 EACH
AMITY RD. STA. 9+15 TO STA. 10+70

END ROAD WORK (1) G20-2 (48" X 24")

STA. 48+40.00
END JOB 080517

ROAD WORK 1500 FT. (1) W20-1 (48" X 48")
ROAD WORK 1000 FT. (1) W20-1 (48" X 48")
ROAD WORK 500 FT. (1) W20-1 (48" X 48")

500' 500' 500'

50+00
15+00
45+00

C.L. EXIST. ELSINGER BLVD.
C.L. ELSINGER BLVD.

END ROAD WORK (1) G20-2 (48" X 24")

STA. 23+45.00
END AMITY RD.

PT 27+55.76

C.L. AMITY RD. CONNECTION

PC 23+14.66

C.L. EXIST. AMITY RD.

25+00 20+00 15+00

C.L. AMITY RD. DETOUR

PT 25+47.41

C.L. I-40 MEDIAN
7200+00

7205+00
40+00

PT 16+61.63

PC 15+00.36

PRECAST CONCRETE BARRIER IN PLACE

PI 13+07.11

PT 11+23.53

10+00

PI 10+47.48

7210+00

90+00

END ROAD WORK (1) G20-2 (48" X 24")

STA. 10+35.00
BEGIN AMITY RD.

ROAD WORK 500 FT. (1) W20-1 (48" X 48")
ROAD WORK 1000 FT. (1) W20-1 (48" X 48")
ROAD WORK 1500 FT. (1) W20-1 (48" X 48")

500' 500' 500'

C.L. AMITY RD. DETOUR
P.I. = 25+47.41
Δ = 45°12'46" RT.
D = 10°15'00"
T = 232.76'
L = 441.10'
P.C. = 23+14.66
P.T. = 27+55.76
e = NO SUPER
Ls = NA

C.L. AMITY RD. DETOUR
P.I. = ~~16+01.52~~ 15+81.64
Δ = ~~13°16'54" LT.~~ 17°44'22" LT.
D = 11°00'00"
T = ~~60.64'~~ 81.28'
L = ~~120.74'~~ 161.27'
P.C. = ~~15+40.88~~ 15+00.36
P.T. = ~~16+61.62~~ 16+61.63
e = NO SUPER
Ls = N/A

C.L. AMITY RD. DETOUR
P.I. = 13+07.17
Δ = 6°59'58" RT.
D = 7°00'00"
T = 50.06'
L = 99.99'
P.C. = 12+57.11
P.T. = 13+57.10
e = NO SUPER
Ls = N/A

C.L. AMITY RD. DETOUR
P.I. = ~~10+67.54~~ 10+47.48
Δ = ~~14°18'46" LT.~~ 16°51'15" LT.
D = 11°00'00"
T = ~~65.40'~~ 77.17'
L = ~~130.12'~~ 153.22'
P.C. = ~~10+02.14~~ 9+70.31
P.T. = ~~11+32.25~~ 11+23.53
e = NO SUPER
Ls = N/A

C.L. EXIST. AMITY RD. DETOUR EAST

(1) W20-1 (48" X 48")
ROAD WORK 500 FT.
ROAD WORK 1000 FT.
ROAD WORK 1500 FT.

STAGE I GRADING AND PAVING
TRAFFIC
TRAFFIC DRUM

MAINTENANCE OF TRAFFIC DETAILS
STAGE I

1"=120'

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED
2-10-2016			

FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080517	32	182

2 MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.11835
TODD E. MUELLER
Digitally Signed 02/10/2016

STAGE 2
CONSTRUCTION SEQUENCE NOTES

1. SHIFT TRAFFIC ONTO NEW AMITY RD. DETOUR.
2. CONSTRUCT TEMPORARY DRIVEWAY FROM STA. 8+93 TO STA. 12+31 AND DRIVEWAY 1 FROM STA. 12+31 TO STA. 14+14 AS SHOWN ON THE PLANS.
3. PLACE CONSTRUCTION PAVEMENT MARKINGS AND REMOVABLE CONSTRUCTION PAVEMENT MARKINGS SHOWN FOR STAGE 3 TRAFFIC CONFIGURATION.

STAGE 2 - CONSTRUCTION PAVEMENT MARKINGS

AMITY RD. DETOUR STA. 10+83 TO STA. 26+24
CENTER DOUBLE YELLOW LINE = 1541 L.F.

AMITY RD. DETOUR STA. 10+83 TO STA. 25+68
N.B. OUTSIDE LANE LINE = 1485 L.F.

AMITY RD. DETOUR STA. 10+62 TO STA. 27+55
S.B OUTSIDE LANE LINE = 1693 L.F.

1 AMITY RD. CONNECTION STA. 10+11 TO STA. 10+85
CENTER DOUBLE YELLOW LINE = 60 L.F.

1 AMITY RD. CONNECTION STA. 10+11 TO STA. 10+85
E.B. OUTSIDE LANE LINE = 67 L.F.

1 AMITY RD. CONNECTION STA. 10+11 TO STA. 10+85
W.B. OUTSIDE LANE LINE = 116 L.F.

1 ~~ELSINGER BLVD. STA. 46+00 TO STA. 48+40~~
~~CENTER DOUBLE YELLOW LINE = 240 L.F.~~

STAGE 2 - REMOVABLE CONSTRUCTION PAVEMENT MARKINGS

AMITY RD. DETOUR STA. 10+00 TO STA. 10+83
CENTER DOUBLE YELLOW LINE = 83 L.F.

AMITY RD. DETOUR STA. 10+00 TO STA. 10+83
N.B. OUTSIDE LANE LINE = 83 L.F.

AMITY RD. DETOUR STA. 10+00 TO STA. 10+62
S.B OUTSIDE LANE LINE = 62 L.F.

AMITY RD. DETOUR STA. 26+24 TO STA. 27+55
CENTER DOUBLE YELLOW LINE = 132 L.F.

AMITY RD. DETOUR STA. 25+68 TO STA. 27+55
N.B. OUTSIDE LANE LINE = 187 L.F.

TRAFFIC DRUMS @ 30' O.C. = 5 EACH
AMITY RD. DETOUR STA. 25+68 TO STA. 26+91

TRAFFIC DRUMS @ 30' O.C. = 6 EACH
AMITY RD. DETOUR STA. 10+00 TO STA. 11+63

TRAFFIC DRUMS @ 30' O.C. = 3 EACH
AMITY RD. DETOUR STA. 14+83 TO STA. 15+43

N

1"=120'

STA. 48+40.00
END JOB 080517

STA. 23+45.00
END AMITY RD.

STA. 10+35.00
BEGIN AMITY RD.

END ROAD WORK (1) G20-2 (48" X 24") RETAIN FROM PREVIOUS STAGE

ROAD WORK 1500 FT. (1) W20-1 (48" X 48") RETAIN FROM PREVIOUS STAGE

ROAD WORK 1000 FT. (1) W20-1 (48" X 48") RETAIN FROM PREVIOUS STAGE

ROAD WORK 500 FT. (1) W20-1 (48" X 48") RETAIN FROM PREVIOUS STAGE

ROAD CLOSED (1) R11-2 (48" X 30") (1) W1-6 (48" X 24") (16') BARR. TYP. III RT.

ROAD CLOSED (1) R11-2 (48" X 30") (1) W1-6 (48" X 24") (16') BARR. TYP. III RT.

(1) R11-2 (48" X 30") (16') BARR. TYP. III RT. (16') BARR. TYP. III LT.

ROAD CLOSED (1) R11-2 (48" X 30") (1) W1-6 (48" X 24") (16') BARR. TYP. III RT.

30 M.P.H. (1) W1-4 (48" X 48") RETAIN FROM PREVIOUS STAGE (1) W13-1 (18" X 18") RETAIN FROM PREVIOUS STAGE

ROAD WORK 1000 FT. (1) W20-1 (48" X 48") RETAIN FROM PREVIOUS STAGE

STOP (1) R1-1 (30" X 30")

ROAD WORK 1500 FT. (1) W20-1 (48" X 48") RETAIN FROM PREVIOUS STAGE

30 M.P.H. (1) W1-4 (48" X 48") RETAIN FROM PREVIOUS STAGE (1) W13-1 (18" X 18") RETAIN FROM PREVIOUS STAGE

ROAD WORK 1500 FT. (1) W20-1 (48" X 48") RETAIN FROM PREVIOUS STAGE

ROAD WORK 1000 FT. (1) W20-1 (48" X 48") RETAIN FROM PREVIOUS STAGE

END ROAD WORK (1) G20-2 (48" X 24") RETAIN FROM PREVIOUS STAGE

4" DOUBLE YELLOW
4" SOLID WHITE
4" SOLID WHITE
4" DOUBLE YELLOW

C.L. DRIVEWAY 1
C.L. ELSINGER BLVD.
EXIST. ELSINGER BLVD.
C.L. TEMPORARY DRIVEWAY
C.L. AMITY RD. CONNECTION
C.L. AMITY RD. DETOUR
C.L. I-40 MEDIAN
C.L. 6TH STREET
AMITY RD.

PRECAST CONCRETE BARRIER IN PLACE
TEMPORARY IMPACT ATTENUATION BARRIER
PRECAST CONCRETE BARRIER I-40 STA. 7198+30 TO STA. 7207+20
SPECIAL END UNIT

7200+00
7205+00
7210+00
40+00
45+00
00+05
00+00
20+00
15+00
10+00

500' 500' 500'

STAGE 2 GRADING AND PAVING
TRAFFIC
TEMPORARY IMPACT ATTENUATION BARRIER
PRECAST CONCRETE BARRIER
TRAFFIC DRUM

MAINTENANCE OF TRAFFIC DETAILS
STAGE 2

72

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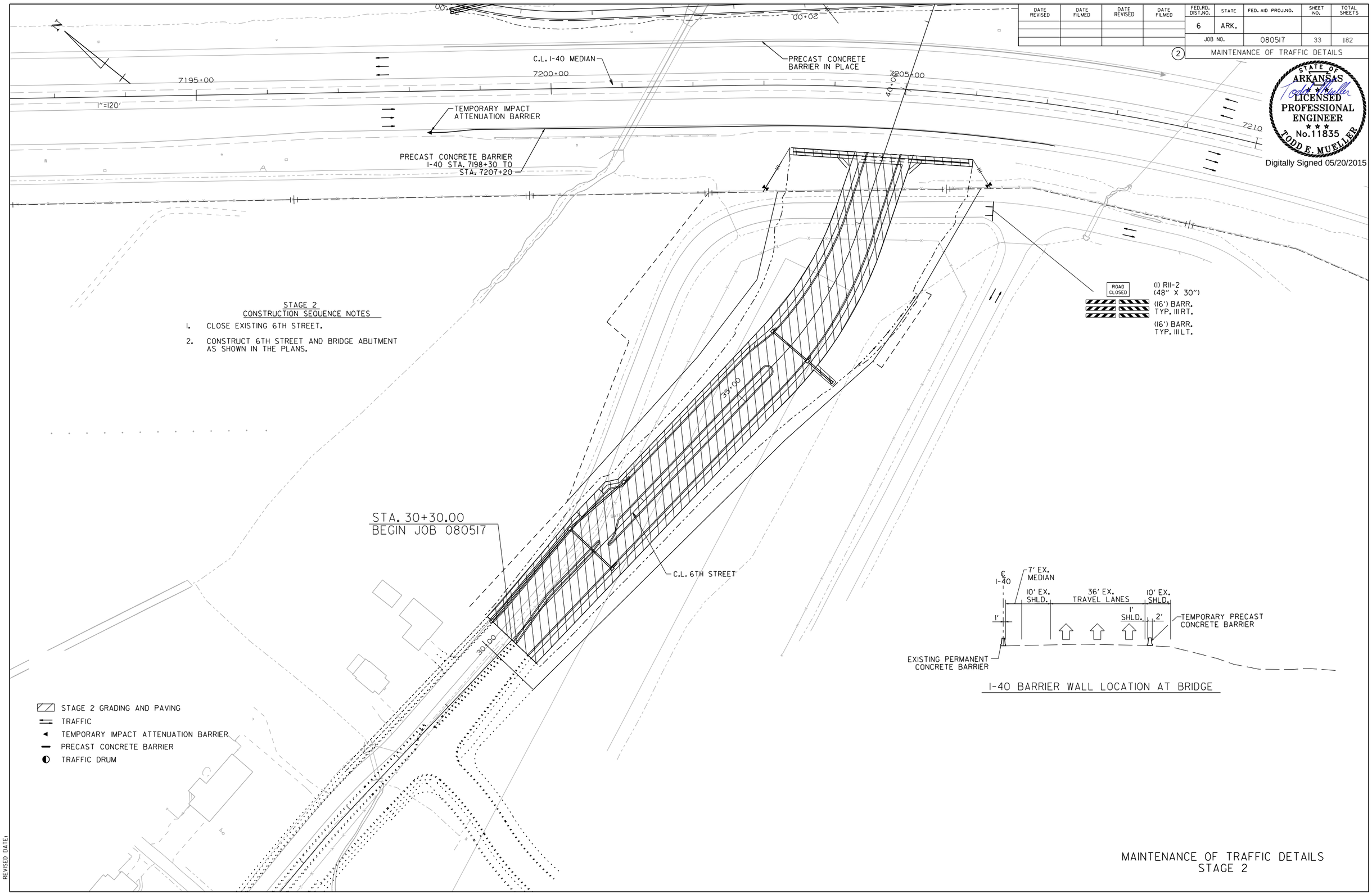
				6	ARK.			
				JOB NO.		080517	33	182

(2) MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.11835
TODD E. MUELLER
Digitally Signed 05/20/2015



STAGE 2
CONSTRUCTION SEQUENCE NOTES

1. CLOSE EXISTING 6TH STREET.
2. CONSTRUCT 6TH STREET AND BRIDGE ABUTMENT AS SHOWN IN THE PLANS.

- STAGE 2 GRADING AND PAVING
- TRAFFIC
- TEMPORARY IMPACT ATTENUATION BARRIER
- PRECAST CONCRETE BARRIER
- TRAFFIC DRUM

I-40 BARRIER WALL LOCATION AT BRIDGE

MAINTENANCE OF TRAFFIC DETAILS
STAGE 2

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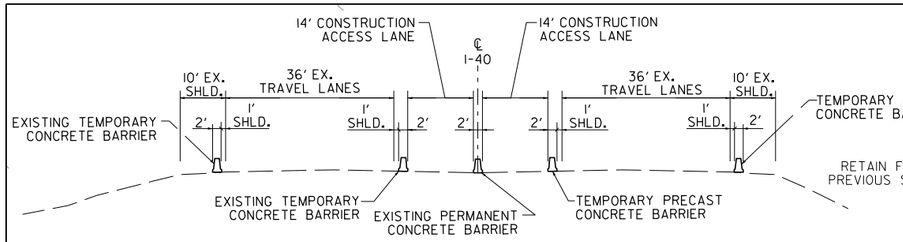
FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080517	34	182

(2) MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.11835
TODD E. MUELLER
Digitally Signed 02/10/2016



BARRIER WALL LOCATION AT BRIDGE
STAGES 3 - 6

STAGE 3 - REMOVABLE CONSTRUCTION PAVEMENT MARKINGS

1. DRIVEWAY 1 STA. ~~12+30~~ 12+31 TO STA. 14+22 CENTER DOUBLE YELLOW LINE = 188 L.F.
2. DRIVEWAY 1 STA. ~~12+30~~ 12+31 TO STA. 14+22 E.B. OUTSIDE LANE LINE = 188 L.F.
3. DRIVEWAY 1 STA. ~~12+30~~ 12+31 TO STA. 14+22 W.B. OUTSIDE LANE LINE = 188 L.F.

STAGE 3 - CONSTRUCTION PAVEMENT MARKINGS

1. TEMP. DRIVEWAY STA. 8+93 TO STA. ~~12+30~~ 12+31 CENTER DOUBLE YELLOW LINE = 341 L.F.
2. TEMP. DRIVEWAY STA. 8+93 TO STA. ~~12+30~~ 12+31 E.B. OUTSIDE LANE LINE = 383 L.F.
3. TEMP. DRIVEWAY STA. 8+93 TO STA. ~~12+30~~ 12+31 W.B. OUTSIDE LANE LINE = 377 L.F.

STAGE 3
CONSTRUCTION SEQUENCE NOTES

1. MAINTAIN TRAFFIC ON AMITY RD. DETOUR.
2. CONSTRUCT THE NORTH AMITY APPROACH STA. 18+00 TO STA. 23+45, AND ~~TEMP. AMITY RD. CONNECTION~~ ELSINGER BLVD. STA. 46+00 TO STA. 48+40 AS SHOWN ON THE PLANS.
3. PLACE CONSTRUCTION PAVEMENT MARKINGS SHOWN FOR STAGE 4 TRAFFIC CONFIGURATION.

MAINTENANCE OF TRAFFIC DETAILS
STAGE 3

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				JOB NO.		080517	35	182
				(2)	MAINTENANCE OF TRAFFIC DETAILS			

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.11835
TODD E. MUELLER
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STAGE 4 - CONSTRUCTION PAVEMENT MARKINGS

1. ELSINGER BLVD. STA. 46+00 TO STA. 48+40
   CENTER DOUBLE YELLOW LINE = 240 L.F.

   AMITY RD. STA. 18+85 TO STA. 23+45
   CENTER DOUBLE YELLOW LINE = 460 L.F.

1. ~~TEMP. AMITY CONNECTION STA. 10+11 TO STA. 10+71~~
   ~~CENTER DOUBLE YELLOW LINE = 60 L.F.~~

1. ~~TEMP. AMITY CONNECTION STA. 10+11 TO STA. 10+71~~
   ~~E.B. OUTSIDE LANE LINE = 86 L.F.~~

1. ~~TEMP. AMITY CONNECTION STA. 10+11 TO STA. 10+71~~
   ~~W.B. OUTSIDE LANE LINE = 86 L.F.~~

STAGE 4
CONSTRUCTION SEQUENCE NOTES

1. MAINTAIN TRAFFIC ON AMITY RD. DETOUR.
2. CONSTRUCT ROUNDABOUT
   6TH STREET STA. 42+20 TO STA. 42+35
   ELSINGER BLVD. STA. 44+34.92 TO STA. 46+00
   AND AMITY RD. STA. 15+00 TO STA. 16+00
   AS SHOWN ON THE PLANS.
3. PLACE CONSTRUCTION PAVEMENT MARKINGS SHOWN FOR STAGE 5 TRAFFIC CONFIGURATION

TRAFFIC DRUMS @ 30' O.C. = 5 EACH
AMITY RD. DETOUR STA. 25+68 TO STA. 26+91

TRAFFIC DRUMS @ 30' O.C. = 6 EACH
AMITY RD. DETOUR STA. 10+00 TO STA. 11+63

END ROAD WORK (I) G20-2 (48" X 24") RETAIN FROM PREVIOUS STAGE
STA. 48+40.00
END JOB 080517

ROAD WORK 1500 FT. (I) W20-1 (48" X 48") RETAIN FROM PREVIOUS STAGE
ROAD WORK 1000 FT. (I) W20-1 (48" X 48") RETAIN FROM PREVIOUS STAGE
ROAD WORK 500 FT. (I) W20-1 (48" X 48") RETAIN FROM PREVIOUS STAGE
500' 500' 500'

4" DOUBLE YELLOW
C.L. ELSINGER BLVD.
ROAD CLOSED (I) R11-2 (48" X 30") (16') BARR. TYP. III RT. (16') BARR. TYP. III LT. RETAIN FROM PREVIOUS STAGE
C.L. DRIVEWAY 1
45+00

END ROAD WORK (I) G20-2 (48" X 24") RETAIN FROM PREVIOUS STAGE
STA. 23+45.00
END AMITY RD.
ROAD CLOSED (I) R11-2 (48" X 30") (I) W1-6 (48" X 24") (16') BARR. TYP. III RT. RETAIN FROM PREVIOUS STAGE
ROAD CLOSED (I) R11-2 (48" X 30") (I) W1-6 (48" X 24") (16') BARR. TYP. III RT. RETAIN FROM PREVIOUS STAGE
ROAD CLOSED (I) R11-2 (48" X 30") (16') BARR. TYP. III RT. (16') BARR. TYP. III LT.
C.L. AMITY RD.
00+15
10+00
ROAD CLOSED (I) R11-2 (48" X 30") (I) W1-6 (48" X 24") (16') BARR. TYP. III RT. RETAIN FROM PREVIOUS STAGE
(I) W1-4 (48" X 48") (I) W1-3 (18" X 18") RETAIN FROM PREVIOUS STAGE
30 M.P.H.
ROAD WORK 1500 FT. (I) W20-1 (48" X 48") RETAIN FROM PREVIOUS STAGE
ROAD WORK 1000 FT. (I) W20-1 (48" X 48") RETAIN FROM PREVIOUS STAGE
500' 500' 500'

C.L. TEMP. AMITY RD. CONNECTION
4" DOUBLE YELLOW
00+00
20+00
C.L. TEMP. DRIVEWAY
(I) W1-4 (48" X 48") (I) W13-1 (18" X 18") RETAIN FROM PREVIOUS STAGE
30 M.P.H.
ROAD WORK 1000 FT. (I) W20-1 (48" X 48") RETAIN FROM PREVIOUS STAGE
STOP (I) R1-1 (30" X 30") RETAIN FROM PREVIOUS STAGE
C.L. AMITY RD. CONNECTION
PRECAST CONCRETE BARRIER I-40 STA. 7199+50 TO STA. 7207+20
STOP (I) R1-1 (30" X 30") RETAIN FROM PREVIOUS STAGE
C.L. AMITY RD. DETOUR
PRECAST CONCRETE BARRIER IN PLACE
SPECIAL END UNIT
7200+00
7205+00
C.L. I-40 MEDIAN
TEMPORARY IMPACT ATTENUATION BARRIER
SPECIAL END UNIT
TEMPORARY IMPACT ATTENUATION BARRIER
7210+00
ROAD WORK 1500 FT. (I) W20-1 (48" X 48") RETAIN FROM PREVIOUS STAGE
PRECAST CONCRETE BARRIER I-40 STA. 7198+30 TO STA. 7207+20
PRECAST CONCRETE BARRIER I-40 STA. 7203+00 TO STA. 7211+50
END ROAD WORK (I) G20-2 (48" X 24") RETAIN FROM PREVIOUS STAGE
STA. 10+35.00
BEGIN AMITY RD.
C.L. 6TH ST.

N
1"=120'

STAGE 4 GRADING AND PAVING
TRAFFIC
TEMPORARY IMPACT ATTENUATION BARRIER
PRECAST CONCRETE BARRIER
TRAFFIC DRUM

MAINTENANCE OF TRAFFIC DETAILS
STAGE 4

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6	ARK.			
JOB NO.		080517	36	182

(2) MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.11835
TODD E. MUELLER
Digitally Signed 02/10/2016

STAGE 5
CONSTRUCTION SEQUENCE NOTES

1. MAINTAIN TRAFFIC ON AMITY RD. DETOUR. SHIFT TRAFFIC ONTO ELSINGER BLVD., ROUNDABOUT, NORTH AMITY APPROACH, AND AMITY RD. CONNECTION.
2. CONSTRUCT AMITY RD. STA. 10+35 TO STA. 15+00, AND DRIVEWAY 1 STA. 10+25 TO 12+30.

STAGE 5 - CONSTRUCTION PAVEMENT MARKINGS

ROUNDABOUT
SOLID YELLOW LEFT LANE LINE = 534 L.F.

ELSINGER BLVD. STA. 45+16 TO STA. 46+00
E.B. SOLID YELLOW LEFT LANE LINE = 84 L.F.

ELSINGER BLVD. STA. 45+16 TO STA. 46+00
W.B. SOLID YELLOW LEFT LANE LINE = 84 L.F.

ELSINGER BLVD. STA. 45+85 TO STA. 46+95
E.B. SOLID WHITE LEFT TURN LANE LINE = 110 L.F.

YIELD BARS:
ELSINGER BLVD. = 12 L.F.
AMITY RD. = 12. L.F.

ARROWS = 1 EACH
WORDS = 1 EACH

TRAFFIC DRUMS @ 30' O.C. = 5 EACH
AMITY RD. DETOUR STA. 25+68 TO STA. 26+91

TRAFFIC DRUMS @ 30' O.C. = 18 EACH
ROUNDABOUT INSIDE LANE

TRAFFIC DRUMS @ 30' O.C. = 16 EACH
ELSINGER BLVD. STA. 44+26 TO STA. 46+95

TRAFFIC DRUMS @ 30' O.C. = 6 EACH
AMITY RD. DETOUR STA. 10+00 TO STA. 11+63

1"=120'

STA. 48+40.00
END JOB 080517

STA. 23+45.00
END AMITY RD.

STA. 10+35.00
BEGIN AMITY RD.

END ROAD WORK (1) G20-2 (48" X 24") RETAIN FROM PREVIOUS STAGE
ROAD CLOSED (1) R11-2 (48" X 30") (1) W1-6 (48" X 24") (16') BARR. TYP. III RT. RETAIN FROM PREVIOUS STAGE
ROAD CLOSED (1) R11-2 (48" X 30") (1) W1-6 (48" X 24") (16') BARR. TYP. III RT. RETAIN FROM PREVIOUS STAGE
ROAD WORK 1500 FT. (1) W20-1 (48" X 48") RETAIN FROM PREVIOUS STAGE
ROAD WORK 1000 FT. (1) W20-1 (48" X 48") RETAIN FROM PREVIOUS STAGE
ROAD WORK 500 FT. (1) W20-1 (48" X 48") RETAIN FROM PREVIOUS STAGE
(1) W1-4 (48" X 48") 30 M.P.H. (1) W13-1 (18" X 18") RETAIN FROM PREVIOUS STAGE
ROAD WORK 1000 FT. (1) W20-1 (48" X 48") RETAIN FROM PREVIOUS STAGE
STOP (1) R1-1 (30" X 30") RETAIN FROM PREVIOUS STAGE
ROAD WORK 1500 FT. (1) W20-1 (48" X 48") RETAIN FROM PREVIOUS STAGE
ROAD CLOSED (1) R11-2 (48" X 30") (16') BARR. TYP. III RT.
ROAD CLOSED (1) R11-2 (48" X 30") (16') BARR. TYP. III LT.
ROAD CLOSED (1) R11-2 (48" X 30") (16') BARR. TYP. III RT.
(1) R1-2 (60" X 60" X 60")
ROAD WORK 1500 FT. (1) W20-1 (48" X 48") RETAIN FROM PREVIOUS STAGE
ROAD CLOSED (1) R11-2 (48" X 30") (1) W1-6 (48" X 24") (16') BARR. TYP. III RT. RETAIN FROM PREVIOUS STAGE
(1) W1-4 (48" X 48") 30 M.P.H. (1) W13-1 (18" X 18") RETAIN FROM PREVIOUS STAGE
ROAD WORK 1000 FT. (1) W20-1 (48" X 48") RETAIN FROM PREVIOUS STAGE
END ROAD WORK (1) G20-2 (48" X 24") RETAIN FROM PREVIOUS STAGE

C.L. ELSINGER BLVD.
4" DOUBLE YELLOW
LANE USE ARROW
WORK "ONLY" THERMOPLASTIC
4" SOLID WHITE
4" SOLID YELLOW
C.L. DRIVEWAY 1
YIELD LINE
YIELD
C.L. AMITY RD.
C.L. TEMP. AMITY RD. CONNECTION
18+06.88 52.89' LT.
16+50.00 87.17' LT.
4" SOLID YELLOW
PRECAST CONCRETE BARRIER 100 L.F.
C.L. AMITY RD. DETOUR
PRECAST CONCRETE BARRIER I-40 STA. 7199+50 TO STA. 7207+20
SPECIAL END UNIT
PRECAST CONCRETE BARRIER IN PLACE
7200+00
7205+00
7210+00
C.L. I-40 MEDIAN
TEMPORARY IMPACT ATTENUATION BARRIER
PRECAST CONCRETE BARRIER I-40 STA. 7198+30 TO STA. 7207+20
PRECAST CONCRETE BARRIER I-40 STA. 7203+00 TO STA. 7211+50
SPECIAL END UNIT
TEMPORARY IMPACT ATTENUATION BARRIER
C.L. 6TH ST.

STAGE 5 GRADING AND PAVING
TRAFFIC
TEMPORARY IMPACT ATTENUATION BARRIER
PRECAST CONCRETE BARRIER
TRAFFIC DRUM

MAINTENANCE OF TRAFFIC DETAILS
STAGE 5

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED
2-10-2016			

FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080517	37	182

(2) MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.11835
TODD E. MUELLER
Digitally Signed 02/10/2016

STAGE 6 - CONSTRUCTION PAVEMENT MARKINGS

AMITY RD. STA. 14+12 TO STA. 16+00
N.B. SOLID YELLOW LEFT LANE LINE = 188 L.F.

AMITY RD. STA. 10+35 TO STA. 15+00
CENTER DOUBLE YELLOW LINE = 465 L.F.

YIELD BARS:
AMITY RD. = 12. L.F.

STAGE 6
CONSTRUCTION SEQUENCE NOTES

1. SHIFT TRAFFIC ONTO NEW APPROACH LEGS AND ROUNDABOUT.
2. REMOVE AMITY RD. DETOUR AND TEMPORARY DRAINAGE.
3. CONSTRUCT REMAINING BRIDGE AND CONNECT FES AT AMITY RD. STA. 20+50 TO RCB.
4. CONSTRUCT CURB AND GUTTER ALONG EXISTING AMITY RD. STA. ~~9+00~~ 8+70 TO STA. 10+85 AND STA. ~~24+70~~ 23+95 TO STA. 26+60.
5. PLACE FINAL 2" ACHM SURFACE COURSE ON ALL ALIGNMENTS.

STA. 48+40.00
END JOB 080517

TRAFFIC DRUMS @ 30' O.C. = 18 EACH
ROUNDABOUT INSIDE LANE

1" = 120'

C.L. ELSINGER BLVD.

TRAFFIC DRUMS @ 30' O.C. = 16 EACH
ELSINGER BLVD. STA. 44+26 TO STA. 46+95

TRAFFIC DRUMS @ 30' O.C. = 7 EACH
AMITY RD. STA. 14+12 TO STA. 16+00

C.L. DRIVEWAY 1

YIELD
(1) R1-2
(60" X 60" X 60")
4" SOLID YELLOW

END ROAD WORK
(1) G20-2
(48" X 24")
RETAIN FROM PREVIOUS STAGE

STA. 23+45.00
END AMITY RD.

YIELD
(1) R1-2
(60" X 60" X 60")
RETAIN FROM PREVIOUS STAGE

ROAD WORK 1500 FT.
(1) W20-1
(48" X 48")
RETAIN FROM PREVIOUS STAGE

(1) W1-4
(48" X 48")
RETAIN FROM PREVIOUS STAGE
30 M.P.H.
(1) W13-1
(18" X 18")
RETAIN FROM PREVIOUS STAGE
ROAD WORK 1000 FT.
(1) W20-1
(48" X 48")
RETAIN FROM PREVIOUS STAGE

C.L. AMITY RD.

18+06.88
52.89' LT.

16+50.00
87.17' LT.

4" DOUBLE YELLOW

PRECAST CONCRETE BARRIER 100 L.F.

PRECAST CONCRETE BARRIER IN PLACE

PRECAST CONCRETE BARRIER
I-40 STA. 7199+50 TO
STA. 7207+20

SPECIAL END UNIT

C.L. I-40 MEDIAN

TEMPORARY IMPACT ATTENUATION BARRIER

PRECAST CONCRETE BARRIER
I-40 STA. 7198+30 TO
STA. 7207+20

SPECIAL END UNIT

TEMPORARY IMPACT ATTENUATION BARRIER

PRECAST CONCRETE BARRIER
I-40 STA. 7203+00 TO
STA. 7211+50

C.L. 6TH STREET.

STA. 10+35.00
BEGIN AMITY RD.

END ROAD WORK
(1) G20-2
(48" X 24")
RETAIN FROM PREVIOUS STAGE

STAGE 6 OBLITERATE EXISTING PAVEMENT
STAGE 6 GRADING AND PAVING
TRAFFIC
TEMPORARY IMPACT ATTENUATION BARRIER
PRECAST CONCRETE BARRIER
TRAFFIC DRUM

MAINTENANCE OF TRAFFIC DETAILS
STAGE 6

72

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080517	38	182

(2) PERMANENT PAVEMENT MARKINGS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.11835
TODD E. MUELLER

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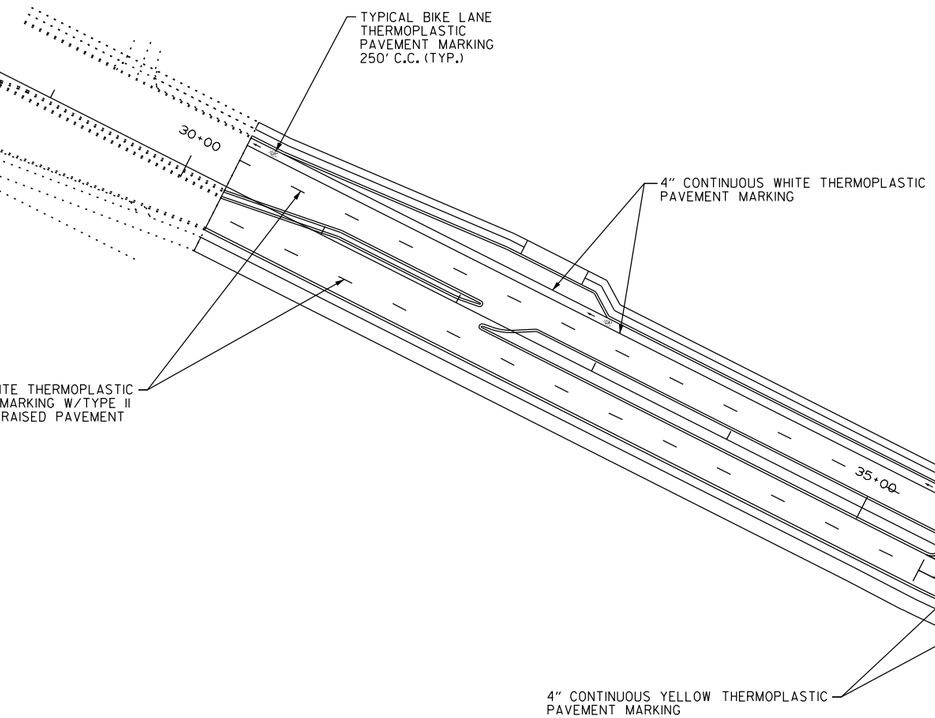
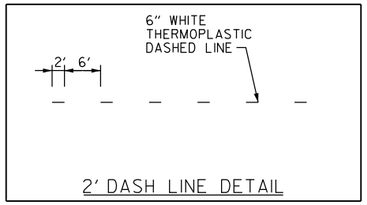
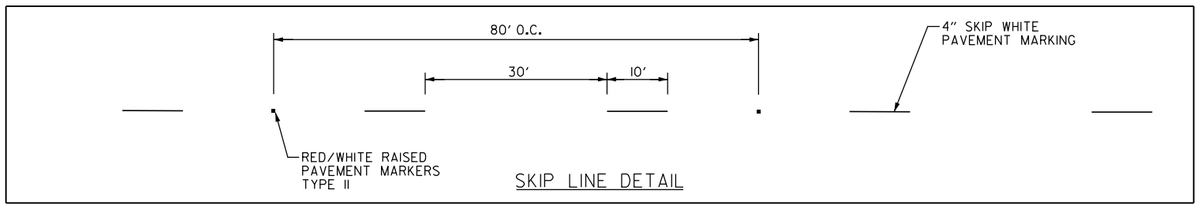




2' DASH LINE DETAIL



SKIP LINE DETAIL

PERMANENT PAVEMENT MARKINGS

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REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080517	39	182
				(2)	PERMANENT PAVEMENT MARKINGS			

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.11835
TODD E. MUELLER
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4" SKIP WHITE HIGH PERFORMANCE CONTRAST PAVEMENT MARKING W/TYPE II RED/WHITE RAISED PAVEMENT MARKERS ON BRIDGE

4" DOUBLE YELLOW HIGH PERFORMANCE CONTRAST PAVEMENT MARKING W/TYPE II YELLOW/YELLOW RAISED PAVEMENT MARKERS ON BRIDGE 40' O.C.

6TH STREET

4" DOTTED WHITE THERMOPLASTIC PAVEMENT MARKING (2' STRIPE, 6' GAP)

8" WIDE DOTTED WHITE THERMOPLASTIC PAVEMENT MARKING (2' STRIPE, 6' GAP)

SHARROW LANE SYMBOL THERMOPLASTIC 250' C.C. (TYPICAL)

AMITY RD.

LANE-USE ARROW THERMOPLASTIC

4" CONTINUOUS WHITE THERMOPLASTIC PAVEMENT MARKING

8" WIDE DOTTED WHITE THERMOPLASTIC PAVEMENT MARKING (2' STRIPE, 6' GAP)

8" YELLOW - 45° DIAGONAL THERMOPLASTIC PAVEMENT MARKING @ 10' O.C.

4" CONTINUOUS YELLOW THERMOPLASTIC PAVEMENT MARKING

LANE-USE ARROW THERMOPLASTIC

12" WHITE CROSSWALK LINE (TYPICAL)

4" CONTINUOUS WHITE THERMOPLASTIC PAVEMENT MARKING

4" CONTINUOUS WHITE THERMOPLASTIC PAVEMENT MARKING

4" DOUBLE YELLOW THERMOPLASTIC PAVEMENT MARKING W/TYPE II YELLOW/YELLOW RAISED PAVEMENT MARKERS @ 80' O.C.

10+00

15+00

20+00

10.00

10.85

4" CONTINUOUS WHITE THERMOPLASTIC PAVEMENT MARKING

4" DOUBLE YELLOW THERMOPLASTIC PAVEMENT MARKING W/TYPE II YELLOW/YELLOW RAISED PAVEMENT MARKERS @ 80' O.C.

4" CONTINUOUS YELLOW THERMOPLASTIC PAVEMENT MARKING

12" WHITE CROSSWALK LINE (TYPICAL)

LANE-USE ARROW THERMOPLASTIC

4" CONTINUOUS WHITE THERMOPLASTIC PAVEMENT MARKING

4" CONTINUOUS YELLOW THERMOPLASTIC PAVEMENT MARKING

8" YELLOW - 45° DIAGONAL THERMOPLASTIC PAVEMENT MARKING @ 10' O.C.

8" WIDE DOTTED WHITE THERMOPLASTIC PAVEMENT MARKING (2' STRIPE, 6' GAP)

4" DOTTED WHITE THERMOPLASTIC PAVEMENT MARKING (2' STRIPE, 6' GAP)

LANE-USE ARROW THERMOPLASTIC

4" CONTINUOUS WHITE THERMOPLASTIC PAVEMENT MARKING

WORD "ONLY" THERMOPLASTIC

SEE 3' DASH LINE DETAIL

TURN LANE-USE ARROW THERMOPLASTIC

4" CONTINUOUS YELLOW THERMOPLASTIC PAVEMENT MARKING

LANE-USE ARROW THERMOPLASTIC

4" DOUBLE YELLOW THERMOPLASTIC PAVEMENT MARKING W/TYPE II YELLOW/YELLOW RAISED PAVEMENT MARKERS @ 40' O.C.

WORD "ONLY" THERMOPLASTIC

TURN LANE-USE ARROW THERMOPLASTIC

4" CONTINUOUS WHITE THERMOPLASTIC PAVEMENT MARKING

12" WHITE STOP BAR THERMOPLASTIC PAVEMENT MARKING

8" YELLOW - 45° DIAGONAL THERMOPLASTIC PAVEMENT MARKING @ 5' O.C.

4" CONTINUOUS YELLOW THERMOPLASTIC PAVEMENT MARKING

TURN LANE-USE ARROW THERMOPLASTIC

12" YELLOW STOP BAR THERMOPLASTIC PAVEMENT MARKING

11+73

EL SINGER BLVD.

50+00

LANE-USE ARROW THERMOPLASTIC

4" SKIP WHITE THERMOPLASTIC PAVEMENT MARKING W/TYPE II RED/WHITE RAISED PAVEMENT MARKERS

4" CONTINUOUS WHITE THERMOPLASTIC PAVEMENT MARKING

4" DOUBLE YELLOW THERMOPLASTIC PAVEMENT MARKING

LANE-USE ARROW THERMOPLASTIC

TURN LANE-USE ARROW THERMOPLASTIC

WORD "STOP" THERMOPLASTIC

TURN LANE-USE ARROW THERMOPLASTIC

4" CONTINUOUS WHITE THERMOPLASTIC PAVEMENT MARKING

4" DOUBLE YELLOW THERMOPLASTIC PAVEMENT MARKING W/TYPE II YELLOW/YELLOW RAISED PAVEMENT MARKERS @ 40' O.C.

6" WHITE THERMOPLASTIC DASHED LINE

3' 9'

3' DASH LINE DETAIL

1' TYP. 1' TYP. 1.5' TYP.

WHITE YIELD LINE THERMOPLASTIC PERPENDICULAR TO ENTRY LANE

TYPICAL YIELD LINE STRIPING

8" CONTINUOUS WHITE THERMOPLASTIC PAVEMENT MARKING

8" CONTINUOUS YELLOW THERMOPLASTIC PAVEMENT MARKING

4" DOUBLE YELLOW THERMOPLASTIC PAVEMENT MARKING W/TYPE II YELLOW/YELLOW RAISED PAVEMENT MARKERS @ 80' O.C.

4" CONTINUOUS YELLOW THERMOPLASTIC PAVEMENT MARKING

8" CONTINUOUS YELLOW THERMOPLASTIC PAVEMENT MARKING

8" CONTINUOUS WHITE THERMOPLASTIC PAVEMENT MARKING

TYPICAL SPLITTER ISLAND STRIPING

1"=100'

PERMANENT PAVEMENT MARKINGS

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WORKSPACE: AHTD
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REVISED DATE:

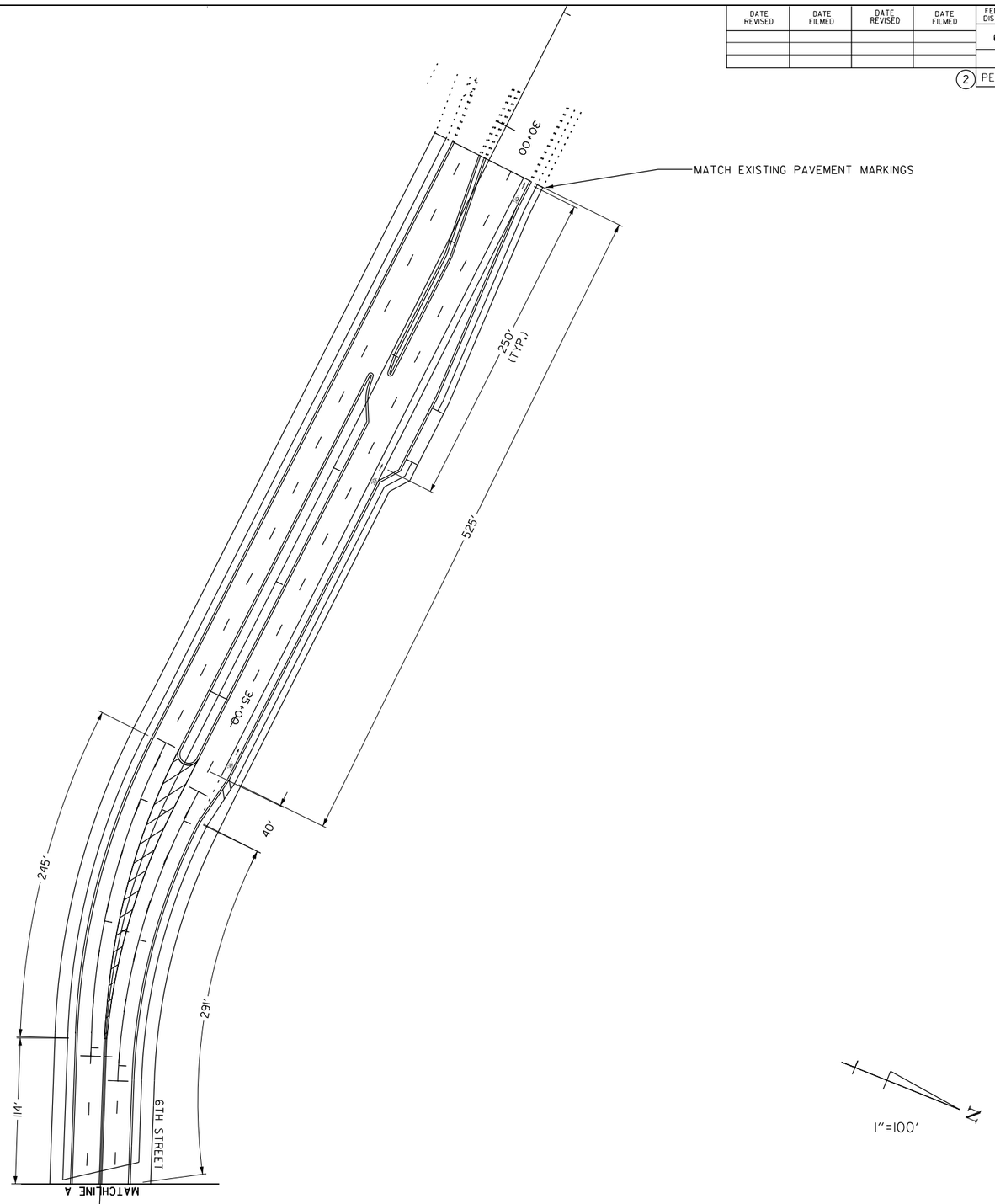
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080517	40	182

(2) PERMANENT PAVEMENT MARKINGS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.11835
TODD E. MUELLER

Digitally Signed 05/20/2015



PERMANENT PAVEMENT MARKINGS

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REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080517	41	182

(2) PERMANENT PAVEMENT MARKINGS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.11835
TODD E. MUELLER
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MATCHLINE A

STA 13+80.48 OFFSET 10.03' LT
STA 14+09.03 OFFSET 1.00' RT
13+00
55'
96'
77'
14+00 40'R
1"=50'

6TH STREET
204'
18'
20+00
7+05.00

FOR DIMENSIONS INSIDE ROUNDABOUT SEE ROUNDABOUT PERMANENT PAVEMENT MARKINGS

250' (TYP.)
AMITY RD.
50'
10+00
10.85
258'
MATCH EXISTING PAVEMENT MARKINGS
1"=100'

50'
10+00
AMITY RD.
120'
MATCH EXISTING PAVEMENT MARKINGS
50'
15+00
10.00
11'

DRIVEWAY 1
PI 13+93.23
14+86

105'
58'
102'
10.00
11+73
ELSINGER BLVD.
50+00

SEE PARKING LOT REPAIR DETAIL FOR PAVEMENT MARKINGS

1"=50'
31'
20'
34'
4'
STA 10+65.45
OFFSET 12.50' RT
35'
24'
10'
10+01
STOP
STOP
6'
4'
15'
40'
39'
54'
PC 10+73.94
MATCH EXISTING PAVEMENT MARKINGS

PERMANENT PAVEMENT MARKINGS

rccorbyn 5/20/2015 7:35:15 AM
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REVISED DATE:

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FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080517	42	182

(2) PERMANENT PAVEMENT MARKINGS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.11835
TODD E. MUELLER
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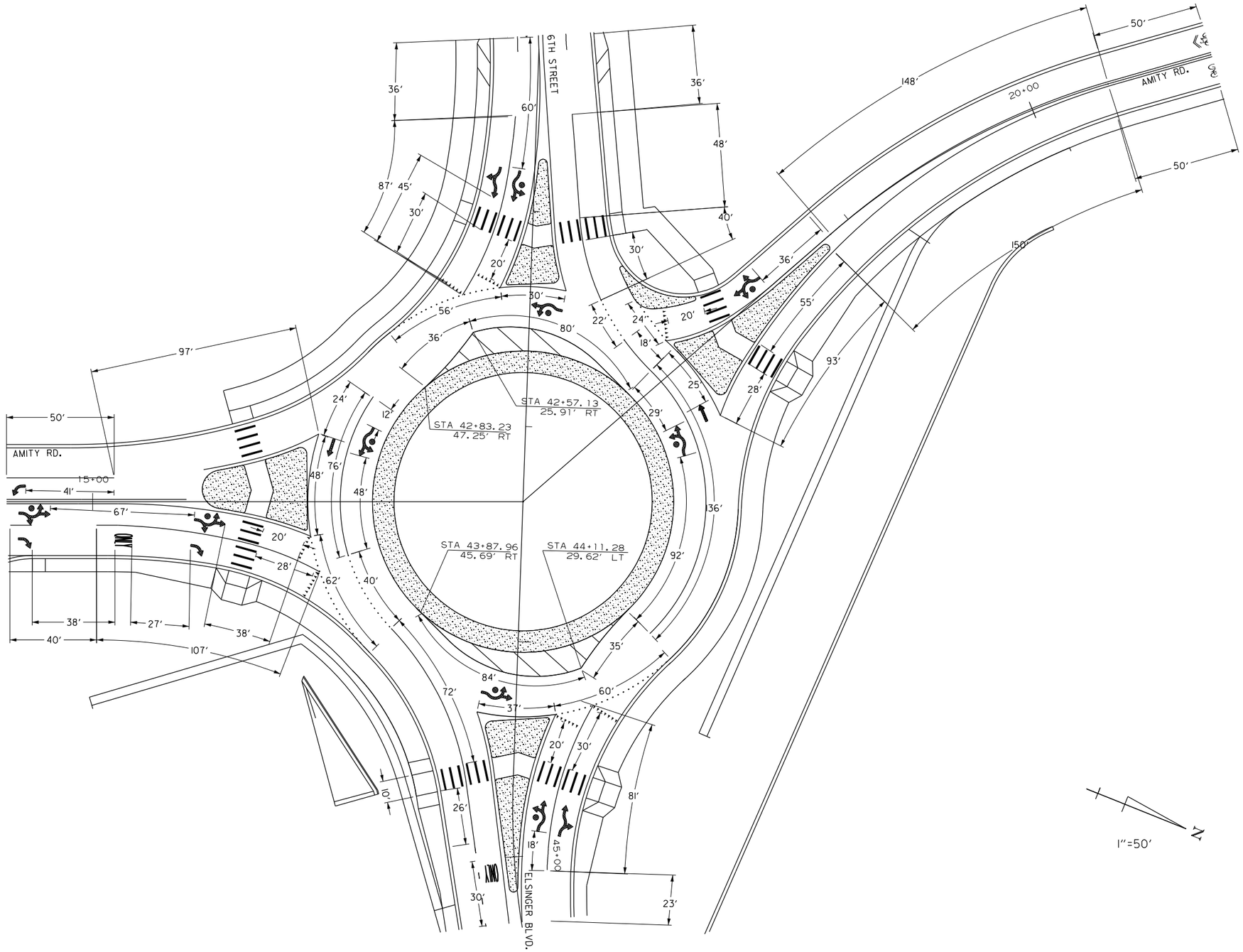

PERMANENT PAVEMENT MARKINGS

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				6	ARK.			
				JOB NO.		080517	43	182
				(2)		SOIL BORING LOG		

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.11835
TODD E. MUELLER

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SOIL BORING LOG

BORING NO.	APPROX. STATION (ft)	OFFSET (ft)	SAMPLE DEPTH (ft)	WATER CONTENT (%)	ATTERBERG LIMITS			SIEVE ANALYSIS		UNIFIED CLASS.	AASHTO CLASS.
					LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	+#4, %	-#200, %		
R1	28+38	3' RT.	2.5-3.5	24	23	19	4	----	96	CL-ML	A-4
R1	28+38	3' RT.	4.5-5.5	23	40	22	18	2	68	CL	A-6
R2	32+33	34' LT.	1-2	17	34	19	15	19	53	CL	A-6
R4	21+80	6' RT.	2.5-3.5	17	35	21	14	----	59	CL	A-6
R4	21+80	6' RT.	4.5-5.5	16	39	23	16	----	60	CL	A-6
R5	42+23	17' LT.	1.5-2.5	14	33	19	14	29	42	GC	A-6
R6	46+67	6' RT.	2.5-3.5	18	40	23	17	----	70	CL	A-6
R6	46+67	6' RT.	4-4.5	13	40	24	16	----	----	SHALE	
R7	11+96	34' RT.	1-2	8	25	16	9	----	23	GC	A-2-4
R7	11+96	34' RT.	2.5-3.5	17	35	18	17	----	50	SC	A-6

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REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2-10-2016				6	ARK.			
				JOB NO.		080517	44	182

(2) SURVEY CONTROL DETAILS

SURVEY CONTROL COORDINATES

Project Name: CantrellField Survey Topo
Date: 6/30/2014
Coordinate System: ARKANSAS STATE PLANE - NORTH ZONE BASED ON GPS CONTROL, PROJECTED TO GROUND.
Units: U.S. SURVEY FOOT

Point Name	Northing	Easting	Elev	Feature	Description
1	275409.399700	1186421.120900	308.8059	CTL	2" ALM MONUMENT
2	274846.930500	1186997.899300	307.1024	CTL	2" ALM MONUMENT
3	274236.786500	1187519.495200	303.8468	CTL	2" ALM MONUMENT
4	273535.589400	1188088.728700	298.2420	CTL	2" ALM MONUMENT
5	275253.892800	1186280.317900	304.7653	CTL	2" ALUM MONUMENT
6	274581.709200	1186258.232900	301.4339	CTL	2" ALUM MONUMENT
8	273587.435000	1186611.647600	298.5491	CTL	2" ALUM MONUMENT
9	273570.951600	1186941.457500	299.2225	CTL	2" ALUM MONUMENT
10	273621.931200	1187764.629200	298.0352	CTL	2" ALUM MONUMENT

*Note - Rebar and Cap - Standard -"- Rebar with 2" Aluminum Cap stamped
*(standard markings common to all caps), or as indicated
(other markings indicated in the point description of the individual point).
ALL DISTANCES ARE GROUND.
USE CAF = 1.0 FOR STAKEOUT FOR THIS PROJECT.
A PROJECT CAF OF .9999676209 HAS BEEN USED TO COMPUTE THE ABOVE GROUND COORDINATES.
THIS CAF IS INTENDED FOR USE WITHIN THE PROJECT LIMITS.
GRID DISTANCE = GROUND DISTANCE X CAF.
GRID COORDINATES ARE STORED UNDER FILE "REVISED-ONGOING-MAIN CANTRELL-FIELD TOPO GI.CTL"
HORIZONTAL DATUM: NAD 83 (1997)
VERTICAL DATUM: NAVD 88 POSITIONAL ACCURACY THIRD ORDER, UNLESS SPECIFIED OTHERWISE AT A SPECIFIC POINT.

BASIS OF BEARING:
ARKANSAS STATE PLANE GRID BEARINGS - 0301-NORTH ZONE
DETERMINED FROM GPS CONTROL POINTS: 230026 - 230020, 230028 - 230028A, 230027 - 230027A
CONVERGENCE ANGLE: 00-14-33 LEFT AT PN: 62
GRID AZIMUTH = ASTRONOMICAL AZIMUTH - CONVERGENCE ANGLE.

ALIGNMENT NAME: I-40

POINT	STATION	TYPE	NORTHING	EASTING
8000	7134+34.67	POB	279034.4201	1183631.6785
8001	7202+60.36	PC	273781.8867	1187990.6826
8002	7220+17.86	PI	272429.4480	1189113.0526
8003	7234+13.20	PT	270816.1053	1188415.9658
8004	7246+74.42	POE	269658.3344	1187915.7208

ALIGNMENT NAME: 6TH STREET (ELSINGER BLVD.)

POINT	STATION	TYPE	NORTHING	EASTING
8005	14+88.73	POB	273591.3147	1185643.6214
8006	25+94.08	PC	273573.2995	1186748.8298
8007	26+60.31	PI	273572.2201	1186815.0492
8008	27+26.49	PT	273566.5562	1186881.0347
8009	35+74.48	PC	273494.0351	1187725.9258
8010	36+89.01	PI	273484.2404	1187840.0363
8011	37+99.96	PT	273523.2166	1187947.7302
8012	43+34.92	PI	273705.2734	1188450.7671
8013	44+66.48	PC	273750.0435	1188574.4702
8014	45+19.64	PI	273768.1362	1188624.4617
8015	45+71.94	PT	273800.7391	1188666.4563
8016	46+25.64	PC	273833.6677	1188708.8706
8017	48+36.66	PI	273963.0748	1188875.5553
8018	50+20.28	PT	274173.9765	1188882.6568
8019	51+25.49	POE	274279.1270	1188886.1975

ALIGNMENT NAME: AMITY RD. SOUTH

POINT	STATION	TYPE	NORTHING	EASTING
8020	9+70.41	POB	273008.3141	1188653.9521
8021	10+40.61	PC	273076.5825	1188637.6149
8022	10+81.32	PI	273116.1792	1188628.1391
8023	11+22.01	PT	273155.1737	1188616.4294
8024	11+76.65	PC	273207.5063	1188600.7143
8025	12+16.43	PI	273245.6056	1188589.2734
8026	12+55.93	PT	273285.2448	1188585.9285
8027	13+11.71	PC	273340.8244	1188581.2385
8028	13+62.29	PI	273391.2335	1188576.9848
8029	14+12.13	PT	273438.1724	1188558.1192
8030	17+00.00	POE	273705.2734	1188450.7671

ALIGNMENT NAME: AMITY RD. NORTH

POINT	STATION	TYPE	NORTHING	EASTING
8030	17+00.00	POB	273705.2734	1188450.7671
8031	18+89.37	PC	273791.5497	1188282.1978
8032	19+64.48	PI	273825.7708	1188215.3354
8033	20+37.17	PT	273885.1451	1188169.3316
8034	20+86.72	PC	273924.3160	1188138.9816
8035	21+21.00	PI	273951.4085	1188117.9901
8036	21+55.17	PT	273975.5168	1188093.6296
8037	24+15.00	POE	274158.2823	1187908.9525

ALIGNMENT NAME: 6TH ST. RIGHT LANES

POINT	STATION	TYPE	NORTHING	EASTING
8038	35+51.96	PC	273476.0335	1187701.7867
8039	36+71.94	PI	273465.7725	1187821.3310
8040	37+88.17	PT	273506.6046	1187934.1533
8041	38+06.59	POE	273512.8731	1187951.4737

ALIGNMENT NAME: 6TH ST. LEFT LANES

POINT	STATION	TYPE	NORTHING	EASTING
8042	35+74.48	POB	273513.9618	1187727.6362
8043	35+96.52	PC	273512.0772	1187749.5924
8044	37+06.07	PI	273502.7084	1187858.7415
8045	38+12.19	PT	273539.9899	1187961.7532

ALIGNMENT NAME: AMITY RD. DETOUR

POINT	STATION	TYPE	NORTHING	EASTING
~~8064~~	~~10+00.00~~	~~POB~~	~~272940.0352~~	~~1188670.2919~~
~~8065~~	~~10+02.14~~	~~PC~~	~~272942.1149~~	~~1188669.7942~~
8064	9+70.31	POB/PC	272910.8575	1188677.2743
~~8066~~	~~10+67.54~~	~~PI~~	~~273005.7172~~	~~1188654.5736~~
8066	10+47.48	PI	272985.9060	1188659.3146
~~8067~~	~~11+32.25~~	~~PT~~	~~273063.5826~~	~~1188625.1021~~
8067	11+23.53	PT	273052.5237	1188620.3668
8098	12+57.11	PC	273167.8397	1188552.9476
8099	13+07.17	PI	273211.0535	1188527.6829
8100	13+57.10	PT	273257.0239	1188507.8723
~~8068~~	~~15+40.88~~	~~PC~~	~~273425.1426~~	~~1188433.7071~~
8068	15+00.36	PC	273388.5875	1188451.1760
~~8069~~	~~16+01.52~~	~~PI~~	~~273478.8006~~	~~1188405.4512~~
8069	15+81.64	PI	273463.2351	1188419.0072
8070	16+61.63	PT	273524.5319	1188365.6238
8071	23+14.66	PC	274016.9875	1187936.7436
8072	25+47.41	PI	274192.5104	1187783.8806
8073	27+55.76	PT	274424.6531	1187800.7662
8074	28+24.20	POE	274492.9189	1187805.7317

ALIGNMENT NAME: AMITY CONNECTION

POINT	STATION	TYPE	NORTHING	EASTING
~~8075~~	~~10+00.00~~	~~POB~~	~~273977.8587~~	~~1187970.8532~~
~~8076~~	~~10+84.70~~	~~POE~~	~~274038.0605~~	~~1188030.4318~~
8075	10+00.00	POB	274124.3573	1187863.3063
8076	10+44.85	PC	274134.2083	1187907.0580
8096	10+66.74	PI	274139.0178	1187928.4185
8097	10+84.91	PT/POE	274123.6163	1187943.9811

ALIGNMENT NAME: DRIVEWAY 1

POINT	STATION	TYPE	NORTHING	EASTING
8077	10+00.00	POB	273445.4720	1188555.1854
8078	10+78.50	PC	273474.7476	1188628.0256
8079	10+93.29	PI	273480.2626	1188641.7474
8080	11+07.99	PT	273488.3511	1188654.1280
8081	11+30.20	PC	273500.5039	1188672.7298
8082	11+77.17	PI	273526.1901	1188712.0464
8083	12+21.23	PT	273524.8687	1188758.9914
8084	13+53.45	PC	273521.1481	1188891.1609
8085	13+93.23	PI	273520.0289	1188930.9216
8086	14+16.06	PT	273559.7826	1188932.2637
8087	28+24.20	POE	273629.5632	1188934.6196

ALIGNMENT NAME: DRIVEWAY 1

POINT	STATION	TYPE	NORTHING	EASTING
8077	10+00.00	POB	273445.4720	1188555.1854
~~8078~~	~~10+78.50~~	~~PC~~	~~273474.7476~~	~~1188628.0256~~
8078	11+61.59	PC	273505.7329	1188705.1196
~~8079~~	~~10+93.29~~	~~PI~~	~~273480.2626~~	~~1188641.7474~~
8079	12+34.89	PI	273533.0681	1188773.1320
~~8080~~	~~11+07.99~~	~~PT~~	~~273488.3511~~	~~1188654.1280~~
8080	13+05.11	PT	273524.3787	1188845.9152
~~8081~~	~~11+30.20~~	~~PC~~	~~273500.5039~~	~~1188672.7298~~
8081	13+13.71	PC	273523.3589	1188854.4566
~~8082~~	~~11+77.17~~	~~PI~~	~~273526.1901~~	~~1188712.0464~~
8082	13+26.71	PI	273521.8180	1188867.3633
~~8083~~	~~12+21.23~~	~~PT~~	~~273524.8687~~	~~1188758.9914~~
8083	13+39.69	PT	273521.4523	1188880.3565
~~8084~~	~~13+53.45~~	~~PC~~	~~273521.1481~~	~~1188891.1609~~
8084	13+50.50	PC	273521.1481	1188891.1609
~~8085~~	~~13+93.23~~	~~PI~~	~~273520.0289~~	~~1188930.9216~~
8085	13+90.28	PI	273520.0289	1188930.9216
~~8086~~	~~14+16.06~~	~~PT~~	~~273559.7826~~	~~1188932.2637~~
8086	14+13.11	PT	273559.7826	1188932.2637
8087	28+24.20	POE	273629.5632	1188934.6196

ALIGNMENT NAME: TEMP. DRIVEWAY

POINT	STATION	TYPE	NORTHING	EASTING
8088	~~8+82.42~~ 8+81.74	POB	273401.3722	1188445.4616
~~8089~~	~~10+78.50~~	~~PC~~	~~273474.7476~~	~~1188628.0256~~
8089	11+61.59	PC	273505.7329	1188705.1196
~~8090~~	~~10+93.29~~	~~PI~~	~~273480.2626~~	~~1188641.7474~~
8090	12+34.89	PI	273533.0681	1188773.1320
~~8091~~	~~11+07.99~~	~~PT~~	~~273488.3511~~	~~1188654.1280~~
8091	13+05.11	PT	273524.3787	1188845.9152
~~8092~~	~~11+30.20~~	~~PC~~	~~273500.5039~~	~~1188672.7298~~
~~8093~~	~~11+77.17~~	~~PI~~	~~273526.1901~~	~~1188712.0464~~
~~8094~~	~~12+21.23~~	~~PT~~	~~273524.8687~~	~~1188758.9914~~
~~8095~~	~~12+30.00~~	~~POE~~	~~273624.6200~~	~~1188767.7500~~
8095	12+31.36	POE	273523.6509	1188772.3703

STATE OF ARKANSAS
Todd E. Mueller
LICENSED PROFESSIONAL ENGINEER
No.11835
TODD E. MUELLER
Digitally Signed 02/10/2016

SURVEY CONTROL DETAILS

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WORKSPACE: AHTD
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REVISED DATE:

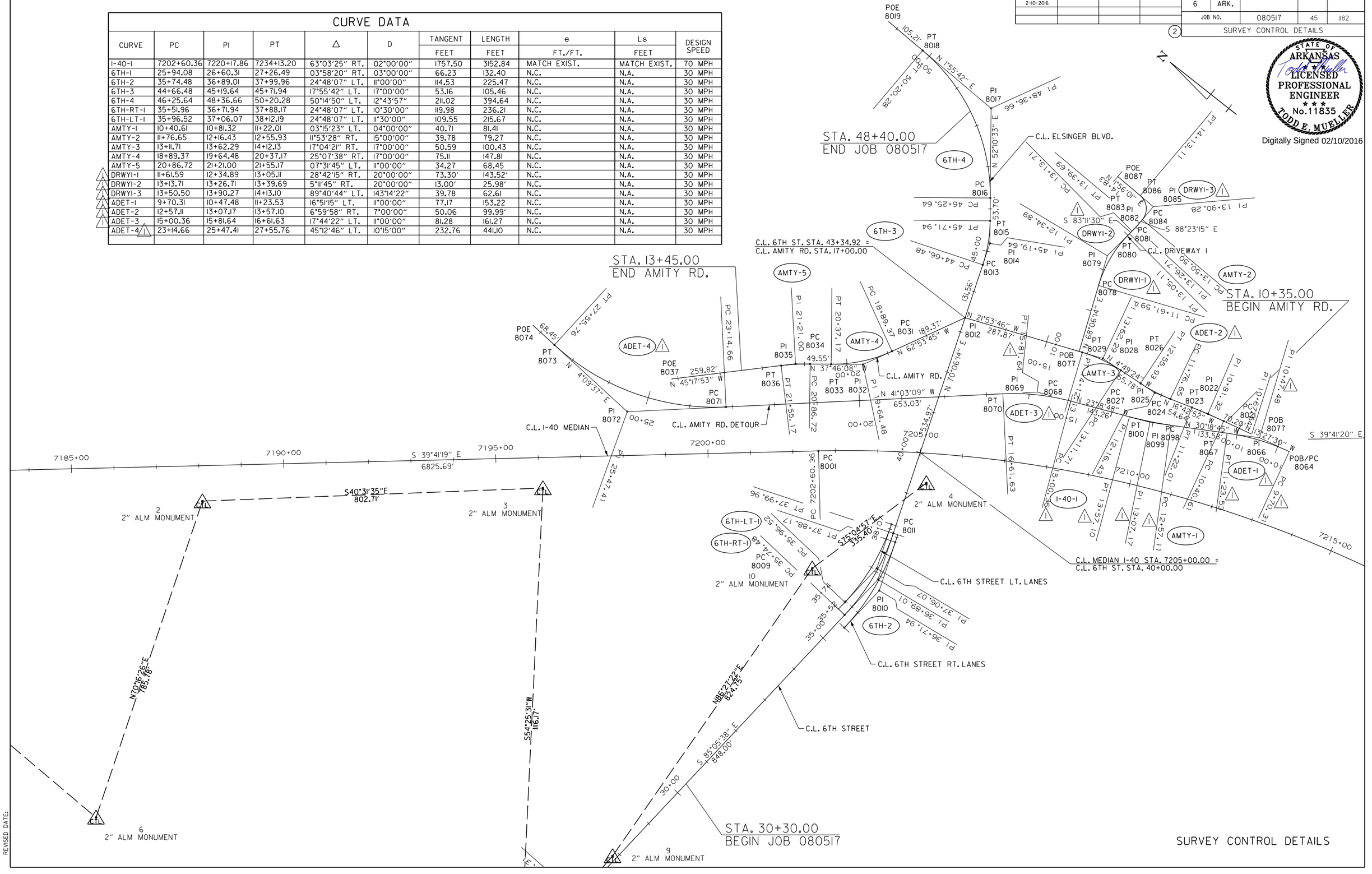
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2-10-2016				6	ARK.			
				JOB NO.		080517	45	182

(2) SURVEY CONTROL DETAILS

STATE OF ARKANSAS
Todd E Mueller
LICENSED PROFESSIONAL ENGINEER
No.11835
TODD E. MUELLER
Digitally Signed 02/10/2016

CURVE DATA

CURVE	PC	PI	PT	Δ	D	TANGENT FEET	LENGTH FEET	e FT./FT.	Ls FEET	DESIGN SPEED
I-40-I	7202+60.36	7220+17.86	7234+13.20	63°03'25" RT.	02°00'00"	1757.50	3152.84	MATCH EXIST.	MATCH EXIST.	70 MPH
6TH-I	25+94.08	26+60.31	27+26.49	03°58'20" RT.	03°00'00"	66.23	132.40	N.C.	N.A.	30 MPH
6TH-2	35+74.48	36+89.01	37+99.96	24°48'07" LT.	11°00'00"	114.53	225.47	N.C.	N.A.	30 MPH
6TH-3	44+66.48	45+19.64	45+71.94	17°55'42" LT.	17°00'00"	53.16	105.46	N.C.	N.A.	30 MPH
6TH-4	46+25.64	48+36.66	50+20.28	50°14'50" LT.	12°43'57"	211.02	394.64	N.C.	N.A.	30 MPH
6TH-RT-I	35+51.96	36+71.94	37+88.17	24°48'07" LT.	10°30'00"	119.98	236.21	N.C.	N.A.	30 MPH
6TH-LT-I	35+96.52	37+06.07	38+12.19	24°48'07" LT.	11°30'00"	109.55	215.67	N.C.	N.A.	30 MPH
AMTY-I	10+40.61	10+81.32	11+22.01	03°15'23" LT.	04°00'00"	40.71	81.41	N.C.	N.A.	30 MPH
AMTY-2	11+76.65	12+16.43	12+55.93	11°53'28" RT.	15°00'00"	39.78	79.27	N.C.	N.A.	30 MPH
AMTY-3	13+11.71	13+62.29	14+12.13	17°04'21" RT.	17°00'00"	50.59	100.43	N.C.	N.A.	30 MPH
AMTY-4	18+89.37	19+64.48	20+37.17	25°07'38" RT.	17°00'00"	75.11	147.81	N.C.	N.A.	30 MPH
AMTY-5	20+86.72	21+21.00	21+55.17	07°31'45" LT.	11°00'00"	34.27	68.45	N.C.	N.A.	30 MPH
DRWYI-I	11+61.59	12+34.89	13+05.11	28°42'15" RT.	20°00'00"	73.30'	143.52'	N.C.	N.A.	30 MPH
DRWYI-2	13+13.71	13+26.71	13+39.69	5°11'45" RT.	20°00'00"	13.00'	25.98'	N.C.	N.A.	30 MPH
DRWYI-3	13+50.50	13+90.27	14+13.10	89°40'44" LT.	143°14'22"	39.78	62.61	N.C.	N.A.	30 MPH
ADET-I	9+70.31	10+47.48	11+23.53	16°51'15" LT.	11°00'00"	77.17	153.22	N.C.	N.A.	30 MPH
ADET-2	12+57.11	13+07.17	13+57.10	6°59'58" RT.	7°00'00"	50.06	99.99'	N.C.	N.A.	30 MPH
ADET-3	15+00.36	15+81.64	16+61.63	17°44'22" LT.	11°00'00"	81.28	161.27	N.C.	N.A.	30 MPH
ADET-4	23+14.66	25+47.41	27+55.76	45°12'46" LT.	10°15'00"	232.76	441.10	N.C.	N.A.	30 MPH



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REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2-10-2016				6	ARK.			
				JOB NO.		080517	46	182

(2) PLAN AND PROFILE - I-40

+83 262.42'
+90 250'
+90 222.43'
+75 223.74'
+14.40 234.35'
+13 299'
+72.88 273'
+68 235.20'
+75 255'
+68.91 246.18'
N45°17'51"W 259.82'
C.L. AMITY RD.
N37°46'08"W 49.55'
N62°53'46"W 185.37'
N21°53'46"W 287.87'
N4°49'24"W 55.78'
N16°42'53"W 54.64'
N13°27'80"W 70.20'
+12.56
+97.75 155.62'
PC 20+98.72
19+64.48
N10°06'15"E 534.97'
+94.51 179.42'
PT 14+12.13
PC 13+11.71
PT 12+16.43
PT 11+22.01
PC 10+40.61
PT 12+55.99
PC 11+76.66
PI 10+81.32
+55 250.63'
+70.26 250.93'
+94.48 190.54'
CONSTRUCTION LIMITS
STA. 7206+42 CONSTRUCT TYPE ST DROP INLET 3' LT. (3'-0" X 3'-0" X H=5'-2") WITH 24" X 2' R.C. PIPE OUTLET TO DROP INLET ON RT. (CLASS III) TYPE 3 BEDDING
STA. 7205+20 IN PLACE DROP INLET 3' LT. W/ 24" X 120' PIPE OUTLET REMOVE
EXISTING AMITY RD.
7200+00
7205+00
7210+00
S39°41'20"E 6825.69'
36' EX.
10' EX. SHLD.
EXISTING MEDIAN BARRIER WALL
C.L. 6TH ST.
PC 7202+60.36
40+00
STA. 7206+42 CONSTRUCT TYPE ST DROP INLET 3' RT. (3'-0" X 5'-2" X H=8'-6") CONNECT TO 24" X 247' PIPE OUTLET TO DROP INLET ON CL. (CLASS III) TYPE 3 BEDDING
+61.67 150.69'
+18.83 150.60'
+05.31 125'
PT 37+99.96
PT 37+88.17
+01.46 145'
CONSTRUCTION LIMITS
C.L. I-40 MEDIAN
C.L. I-40
P.I. = 7220+17.86
Δ = 63°03'25" RT.
D = 2°00'00"
T = 1757.50'
L = 3152.84'
P.C. = 7202+60.36
P.T. = 7234+13.20
e = MATCH EXIST.
Ls = MATCH EXIST.

C.L. I-40 MEDIAN STATIONING	MEDIAN CONCRETE BARRIER WALL (TYPE SPECIAL)
STA. 7203+61 TO STA. 7204+61	= 100 LIN. FT.
STA. 7205+39 TO STA. 7206+39	= 100 LIN. FT.

STATE OF ARKANSAS
Todd E. Mueller
LICENSED PROFESSIONAL ENGINEER
No.11835
TODD E. MUELLER
Digitally Signed 02/10/2016

I-40

EXISTING GROUND

+42 LT.
TOP = 298.96
INV. = 293.79

+42 RT.
TOP = 302.27
INV. = 293.73

340 330 320 310 300 290 280 270 260 250

7200+00 7201+00 7202+00 7203+00 7204+00 7205+00 7206+00 7207+00 7208+00 7209+00 7210+00 7211+00 7212+00 7213+00 7214+00 7215+00

REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA

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DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080517	47	182

(2) PLAN AND PROFILE - 6TH ST.

C.L. 6TH ST.
P.I. = 26+60.31
Δ = 3°58'20" RT.
D = 3°00'00"
T = 66.23'
L = 132.40'
P.C. = 25+94.08
P.T. = 27+26.49
e = NO SUPER
Ls = NA

N

7TH AVE.

8TH AVE.

PI 26+60.31

PC 25+94.08

PT 27+26.49

20+00

25+00

6TH ST.

S89°03'58"E

CONCURRENT CONSTRUCTION BY THE CITY OF CONWAY

6TH ST. STA. 32+46 CONSTRUCT APPROACH ON LT. = 0 CU. YD.

PROP T.C.E.
+46.98
211.42'

+48.95
170.46'

160' TAPER

END R/W JOB 080517

15' TAPER

+53.50

+13.50

+78.50

+93.50

+22.98
75.46'

R/W BY CITY OF CONWAY

+24.77
77.92'

DRIVEWAY 7

5' SWLK.

5' GRASS BUFFER

PROP R/W

+00
85'

CONSTRUCTION LIMITS

+00
29.32'

30+00

38.5'

6'

38'

33'

6'

38'

22'

17'

C.L. 6TH ST.

S85°05'39"E

27.5'

35+00

22'

17'

CONCRETE MEDIAN

+00
70'

+31.00

80' TAPER

+11.00

GRASSED MEDIAN

PROP R/W

10' MULTI-USE

5' GRASS BUFFER

CONSTRUCTION LIMITS

END R/W JOB 080517

STA. 30+30.00
BEGIN JOB 080517

OBLITERATE EXISTING ROADWAY

STATE OF ARKANSAS
Todd E. Mueller
LICENSED PROFESSIONAL ENGINEER
No.11835
TODD E. MUELLER

6TH ST. Digitally Signed 05/20/2015

350
340
330
320
310
300
290
280
270
260

PVI 30+30.00
ELEV. 300.26

PROFILE GRADE

0.50%

PVC 34+00.00
ELEV. 302.11

VC=240.00'
K 43.64

EXISTING GROUND

STA. 30+30.00
BEGIN JOB 080517

REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA

20+00 21+00 22+00 23+00 24+00 25+00 26+00 27+00 28+00 29+00 30+00 31+00 32+00 33+00 34+00 35+00

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REVISED DATE:

DATE	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080517	48	182

(2) PLAN AND PROFILE - 6TH ST.

N

7TH AVE.

8TH AVE.

PI 26+60.31

PC 25+94.08

PT 27+26.49

CONCURRENT CONSTRUCTION BY THE CITY OF CONWAY

20+00

25+00 6TH ST.

30+00

35+00

C.L. 6TH ST.

GATE

STA. 30+30 CONSTRUCT
DROP INLET ON LT., H = 4'-10"
MATCH CITY OF CONWAY PROJECT
TYPE MO INLET = 4'-0" DIA.
TYPE C INLET = 4'-0" X 3'-0"

STA. 33+00 CONSTRUCT
DROP INLET ON LT., H = 4'-10"
W/ 8' EXT. AND 24" X 96'
R.C. PIPE CULVERT TO DROP INLET ON LT.
TYPE MO INLET = 4'-0" DIA.
TYPE C INLET = 4'-0" X 3'-0"

STA. 32+00 CONSTRUCT
DROP INLET ON LT., H = 4'-10"
W/ 24" X 166'
R.C. PIPE CULVERT TO DROP INLET ON LT.
TYPE MO INLET = 4'-0" DIA.
TYPE C INLET = 4'-0" X 3'-0"

STA. 32+00 CONSTRUCT
DROP INLET ON RT., H = 4'-10"
W/ 8' EXT. AND 24" X 79'
R.C. PIPE CULVERT TO DROP INLET ON LT.
TYPE MO INLET = 4'-0" DIA.
TYPE C INLET = 4'-0" X 2'-6"

STA. 30+30.00
BEGIN JOB 080517

OBLITERATE EXISTING ROADWAY

STATE OF ARKANSAS
Todd E. Mueller
LICENSED PROFESSIONAL ENGINEER
No.11835
TODD E. MUELLER
Digitally Signed 05/20/2015

6TH ST.
DRAINAGE PROFILE

PVI 30+30.00
ELEV. 300.26

PROFILE GRADE

0.50%

PVC 34+00.00
ELEV. 302.11

VC=240.00'
K 43.64

24" X 166' @
0.40% LT.

24" X 96' @
0.72% LT.

EXISTING GROUND

+30 LT.
TOP = 300.08
INV. = 295.25

+00 LT.
TOP = 300.74
INV. = 295.91

+00 RT.
TOP = 301.04
INV. = 296.21

+00 LT.
TOP = 301.43
INV. = 296.60

REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA

350 340 330 320 310 300 290 280 270 260

20+00 21+00 22+00 23+00 24+00 25+00 26+00 27+00 28+00 29+00 30+00 31+00 32+00 33+00 34+00 35+00

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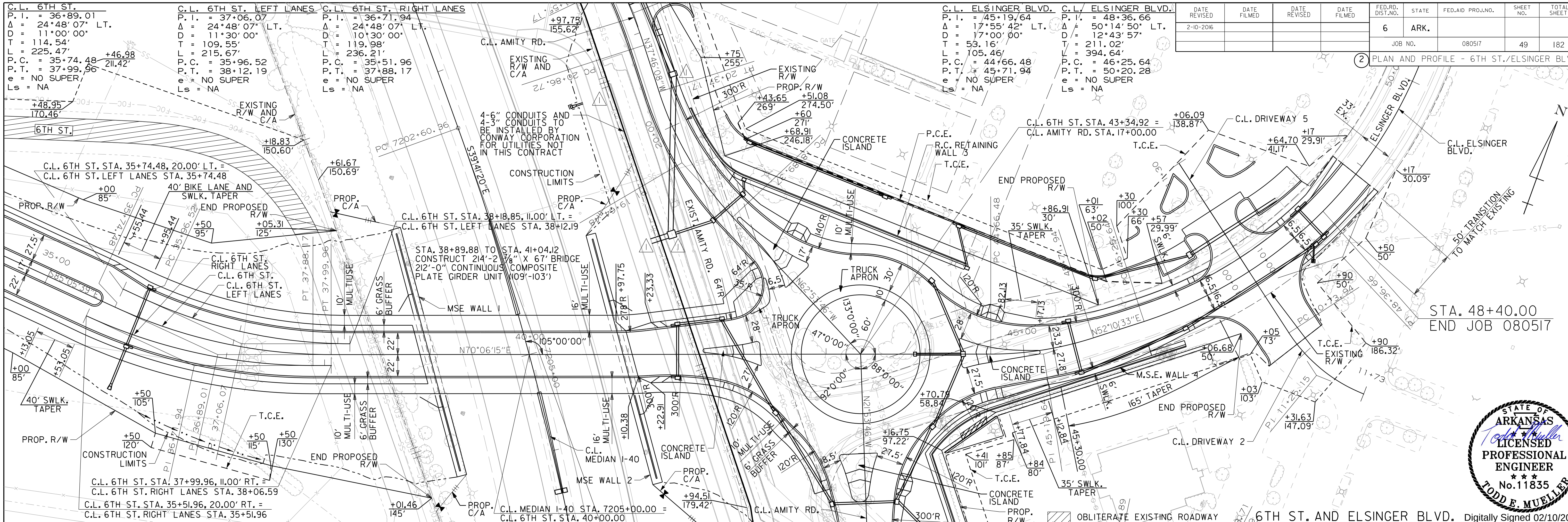
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2-10-2016				6	ARK.			
				JOB NO.		080517	49	182

(2) PLAN AND PROFILE - 6TH ST./ELSINGER BLVD.

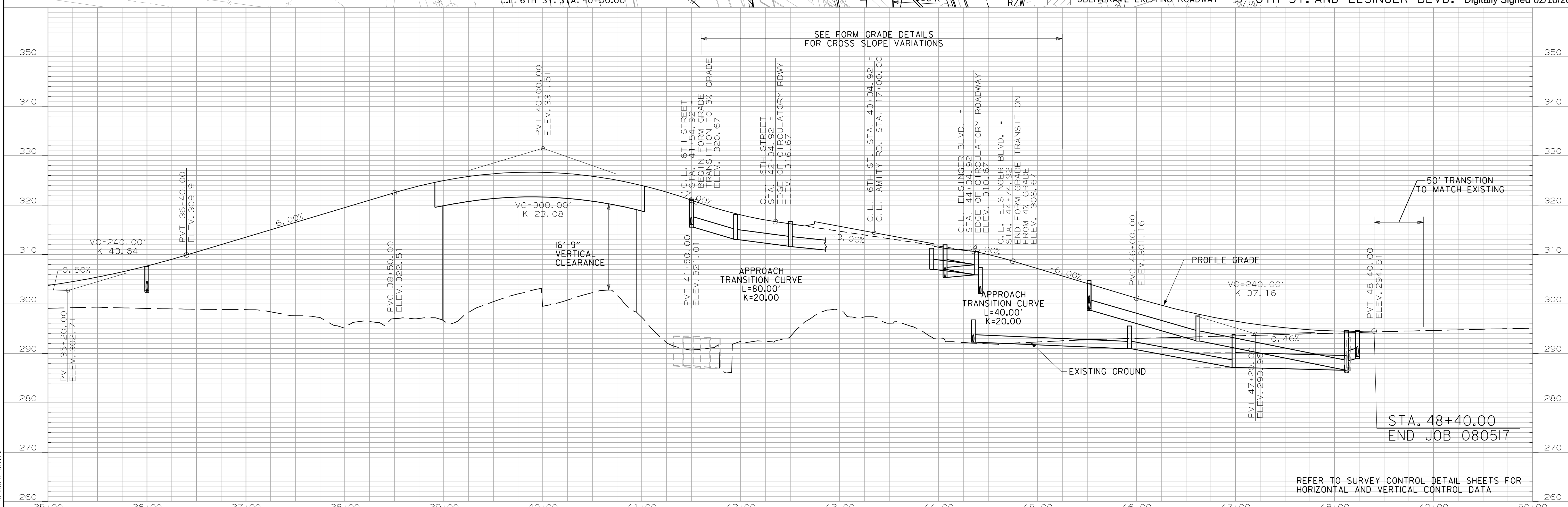


C.L. 6TH ST.
P.I. = 36+89.01
Δ = 24°48'07" LT.
D = 11°00'00"
T = 114.54'
L = 225.47'
P.C. = 35+74.48
P.T. = 37+99.96
e = NO SUPER
Ls = NA
C.L. 6TH ST. LEFT LANES
P.I. = 37+06.07
Δ = 24°48'07" LT.
D = 11°30'00"
T = 109.55'
L = 215.67'
P.C. = 35+96.52
P.T. = 38+12.19
e = NO SUPER
Ls = NA
C.L. 6TH ST. RIGHT LANES
P.I. = 36+71.94
Δ = 24°48'07" LT.
D = 10°30'00"
T = 119.98'
L = 236.21'
P.C. = 35+51.96
P.T. = 37+88.17
e = NO SUPER
Ls = NA
C.L. ELSINGER BLVD.
P.I. = 45+19.64
Δ = 17°55'42" LT.
D = 17°00'00"
T = 53.16'
L = 105.46'
P.C. = 44+66.48
P.T. = 45+71.94
e = NO SUPER
Ls = NA
C.L. ELSINGER BLVD.
P.I. = 48+36.66
Δ = 50°14'50" LT.
D = 12°43'57"
T = 211.02'
L = 394.64'
P.C. = 46+25.64
P.T. = 50+20.28
e = NO SUPER
Ls = NA
C.L. AMITY RD.
EXISTING R/W AND C/A
4-6" CONDUITS AND 4-3" CONDUITS TO BE INSTALLED BY CONWAY CORPORATION FOR UTILITIES NOT IN THIS CONTRACT
CONSTRUCTION LIMITS
PROP. C/A
C.L. 6TH ST. STA. 35+74.48, 20.00' LT. = C.L. 6TH ST. LEFT LANES STA. 35+74.48
40' BIKE LANE AND SWLK. TAPER
END PROPOSED R/W
PROP. R/W
C.L. 6TH ST. STA. 38+18.85, 11.00' LT. = C.L. 6TH ST. LEFT LANES STA. 38+12.19
STA. 38+89.88 TO STA. 41+04.12 CONSTRUCT 214'-2 7/8" X 67' BRIDGE 212'-0" CONTINUOUS COMPOSITE PLATE GIRDER UNIT (109'-103')
C.L. 6TH ST. RIGHT LANES
C.L. 6TH ST. LEFT LANES
10' MULTI-USE
6' GRASS BUFFER
MSE WALL 1
16' MULTI-USE
EXIST. AMITY RD.
TRUCK APRON
CONCRETE ISLAND
P.C.E.
R.C. RETAINING WALL 3
T.C.E.
35' SWLK. TAPER
C.L. 6TH ST. STA. 43+34.92 = C.L. AMITY RD. STA. 17+00.00
C.L. DRIVEWAY 5
C.L. ELSINGER BLVD.
50' TRANSITION TO MATCH EXISTING
STA. 48+40.00
END JOB 080517
EXISTING R/W
M.S.E. WALL 4
165' TAPER
C.L. DRIVEWAY 2
40' SWLK. TAPER
CONSTRUCTION LIMITS
C.L. 6TH ST. STA. 37+99.96, 11.00' RT. = C.L. 6TH ST. RIGHT LANES STA. 38+06.59
C.L. 6TH ST. STA. 35+51.96, 20.00' RT. = C.L. 6TH ST. RIGHT LANES STA. 35+51.96
C.L. MEDIAN I-40
MSE WALL 2
C.L. MEDIAN I-40 STA. 7205+00.00 = C.L. 6TH ST. STA. 40+00.00
C.L. AMITY RD.
OBLITERATE EXISTING ROADWAY

6TH ST. AND ELSINGER BLVD.

STATE OF ARKANSAS LICENSED PROFESSIONAL ENGINEER No.11835 TODD E. MUELLER

Digitally Signed 02/10/2016



SEE FORM GRADE DETAILS FOR CROSS SLOPE VARIATIONS
PVI 35+20.00 ELEV. 302.71
VC=240.00' K 43.64
0.50%
PVT 36+40.00 ELEV. 309.91
6.00%
PVC 38+50.00 ELEV. 322.51
PVI 40+00.00 ELEV. 331.51
VC=300.00' K 23.08
16'-9" VERTICAL CLEARANCE
PVT 41+50.00 ELEV. 321.01
APPROACH TRANSITION CURVE L=80.00' K=20.00
3.00%
4.00%
APPROACH TRANSITION CURVE L=40.00' K=20.00
PVC 46+00.00 ELEV. 301.16
PROFILE GRADE
VC=240.00' K 37.16
0.46%
PVI 47+20.00 ELEV. 293.96
PVT 48+40.00 ELEV. 294.51
EXISTING GROUND
50' TRANSITION TO MATCH EXISTING
STA. 48+40.00
END JOB 080517
350 340 330 320 310 300 290 280 270 260
35+00 36+00 37+00 38+00 39+00 40+00 41+00 42+00 43+00 44+00 45+00 46+00 47+00 48+00 49+00 50+00

REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA

rccorbyn 2/10/2016 4:34:02 PM
WORKSPACE: AHTD
L:\2012\2017590 - Conterll Field Access\Drawings\6TH_ST\6TH_PP_6TH_02.dgn
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6-1-2015				6	ARK.			
2-10-2016				JOB NO.		080517	50	182
8-10-2016								

(2) PLAN AND PROFILE - 6TH ST./ELSINGER BLVD.

STA. 36+00 CONSTRUCT
DROP INLET ON LT., H = 4'-11"
W/ 4' EXT. AND 24" X 62'
R.C. PIPE CULVERT TO DROP INLET ON RT.
TYPE MO INLET = 4'-0" DIA.
TYPE C INLET = 4'-0" X 2'-6"

STA. 36+00 CONSTRUCT
DROP INLET ON RT., H = 5'-3"
W/ 4' EXT. AND 24" X 39'
R.C. PIPE CULVERT TO FES ON RT.
TYPE MO INLET = 4'-0" DIA.
TYPE C INLET = 4'-0" X 2'-6"

STA. 41+50 CONSTRUCT
DROP INLET ON LT., H = 5'-5"
W/ 4' EXT. AND 24" X 41'
R.C. PIPE CULVERT TO DROP INLET ON LT.
TYPE MO INLET = 4'-0" DIA.
TYPE C INLET = 4'-0" X 2'-6"

STA. 41+95 CONSTRUCT
DROP INLET ON LT., H = 5'-2"
W/ 24" X 106'
R.C. PIPE CULVERT TO DROP INLET ON RT.
TYPE MO INLET = 4'-0" DIA.
TYPE C INLET = 4'-0" X 2'-6"

(3) STA. ~~43+93~~ 43+90 CONSTRUCT
DROP INLET ON C.L., H = 4'-5"
W/ 24" X 45'
R.C. PIPE CULVERT TO DROP INLET ON CL.
TYPE E INLET = 3'-0" X 2'-0"

STA. 44+06 CONSTRUCT
DROP INLET ON LT., H = 5'-0"
W/ 24" X 77'
R.C. PIPE CULVERT TO DROP INLET ON RT.
TYPE MO INLET = 4'-0" DIA.
TYPE C INLET = 4'-0" X 3'-6"

STA. 41+50 CONSTRUCT
DROP INLET ON RT., H = 5'-0"
W/ 4' EXT. AND 24" X 51'
R.C. PIPE CULVERT TO DROP INLET ON LT.
TYPE MO INLET = 4'-0" DIA.
TYPE C INLET = 4'-0" X 2'-6"

OBLITERATE EXISTING ROADWAY

SIXTH ST. WHEELCHAIR/BICYCLE RAMPS		
LOCATION	TYPE	AREA (SQ. YD.)
35+61 LT.	SPECIAL II	5.12
41+33 RT.	SPECIAL II	7.24
41+32 LT.	SPECIAL II	5.99
42+00 RT.	3	6.67
42+04 LT.	3	6.74
42+11 LT.	SPECIAL I	8.83
42+11 RT.	SPECIAL I	5.73

STA. 42+50 CONSTRUCT
DROP INLET ON RT., H = 5'-1"
W/ 4' EXT. AND 24" X 105'
R.C. PIPE CULVERT TO DROP INLET ON RT.
TYPE MO INLET = 4'-0" DIA.
TYPE C INLET = 4'-0" X 3'-3"

(1) STA. 44+35 CONSTRUCT
DROP INLET ~~ON~~ 129.3' LT., H = 4'-6"
W/ DBL. 4' EXT. AND 18" X 143'
R.C. PIPE CULVERT TO DROP INLET ON LT.
TYPE MO INLET = 4'-0" DIA.
TYPE C INLET = 4'-0" X 2'-6"

STA. 44+10 IN PLACE
APPROACH ON LT.
REMOVE

STA. 45+52 CONSTRUCT
DROP INLET ON LT., H = 5'-0"
W/ 4' EXT. AND 24" X 51'
R.C. PIPE CULVERT TO DROP INLET ON RT.
TYPE MO INLET = 4'-0" DIA.
TYPE C INLET = 4'-0" X 2'-6"

(1) STA. 44+42 CONSTRUCT
DROP INLET ~~ON~~ 87.0' LT., H = 5'-4"
W/ 18" X 41' R.C. PIPE CULVERT
TO DROP INLET ON LT.
TYPE E INLET = 3'-6" X 2'-0"

STA. 46+98 IN PLACE
36" X 157' R.C. PIPE CULVERT ON LT.
REMOVE 40 L.F.

CONSTRUCT
(1) DROP INLET ~~ON~~ 44.6' LT., H = 6'-8"
W/ 36" X 103'
R.C. PIPE CULVERT TO DROP INLET ON LT.
TYPE ST. INLET = 3'-0" X 4'-6"
CONNECT TO EXISTING 36" R.C. PIPE CULVERT

6TH ST. STA. 47+44 CONSTRUCT
APPROACH ON LT. = 49 CU. YD.

STA. 43+50 TO STA. 44+37 LT CONSTRUCT
CURB REPAIR PARKING LOT AND
CONSTRUCT CURB AND GUTTER

STA. 48+23 CONSTRUCT
DROP INLET ON LT., H = 5'-3"
W/ DBL. 8' EXT. AND 24" X 36'
R.C. PIPE CULVERT TO DROP INLET ON RT.
TYPE MO INLET = 4'-0" DIA.
TYPE C INLET = 4'-0" X 2'-6"

(1) STA. 45+93 CONSTRUCT
DROP INLET ~~ON~~ 56.6' LT., H = 5'-6"
W/ 18" X 95' R.C. PIPE CULVERT
TO DROP INLET ON LT.
TYPE MO INLET = 4'-0" DIA.
TYPE C INLET = 4'-0" X 2'-10"

STA. 48+00 CONSTRUCT
YARD DRAIN ON RT.
TOP = 293.85, H=2'-10"
W/ 12" X 15' R.C. PIPE CULVERT
TO DROP INLET ON RT.

STA. 48+40.00
END JOB 080517

C.L. ELSINGER BLVD.

STA. 48+12 IN PLACE
DROP INLET ON RT.
REMOVE
42" R.C. PIPE CULVERT - RETAIN
CONSTRUCT
DROP INLET ON RT., H= 8'-6"
TYPE MO INLET = 5'-0" DIA.
TYPE C INLET = 4'-4" X 2'-6"

STA. 48+23 CONSTRUCT
DROP INLET ON RT., H = 5'-9"
W/ 4' EXT., AND 24" X 7'
R.C. PIPE CULVERT TO DROP INLET ON RT.
TYPE MO INLET = 4'-0" DIA.
TYPE C INLET = 4'-0" X 2'-6"

STA. 44+38 IN PLACE
APPROACH ON RT.
REMOVE

STA. 44+20 TO STA. 44+70 RT CONSTRUCT
CURB REPAIR PARKING LOT AND
CONSTRUCT CURB AND GUTTER

6TH ST. STA. 47+44 CONSTRUCT
APPROACH ON RT. = 137 CU. YD.

STA. 46+62 CONSTRUCT
DROP INLET ON RT., H = 5'-1"
W/ 24" X 152'
R.C. PIPE CULVERT TO DROP INLET ON RT.
TYPE C INLET = 4'-0" X 2'-6"

STA. 44+06 CONSTRUCT
DROP INLET ON RT., H = 6'-7"
W/ 24" X 81'
R.C. PIPE CULVERT TO DROP INLET ON RT.
TYPE MO INLET = 4'-0" DIA.
TYPE C INLET = 4'-0" X 3'-3"

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.11835
TODD E. MUELLER
Digitally Signed 08/10/2016

6TH ST. AND ELSINGER BLVD. DRAINAGE PROFILE

(1) REVISED CONSTRUCT NOTES TO INCLUDE DISTANCE FROM CENTERLINE, RCC 6-1-15. CHECKED BY TEM

(1) REVISED INLET LOCATION IN DRAINAGE PROFILE, RCC 6-1-15. CHECKED BY TEM

ELSINGER BLVD. WHEELCHAIR/BICYCLE RAMPS		
LOCATION	TYPE	AREA (SQ. YD.)
44+70 LT.	4	31.62
44+67 RT.	5	24.25
46+80 RT.	3	14.41
47+99 RT.	3	5.3
47+00 LT.	3	8.20
47+71 LT.	3	8.20
44+58 LT.	SPECIAL I	7.93
44+58 RT.	SPECIAL I	13.00

REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA

$$USER$$ $$DATE$$ $$TIME$$
WORKSPACE: $$WORKSPACE$$
$$FILE$$
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED
2-10-2016			

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080517	51	182

(2) PLAN AND PROFILE - AMITY RD.

AMITY RD. WHEELCHAIR/BICYCLE RAMPS		
LOCATION	TYPE	AREA (SQ. YD.)
13+66 RT.	3	13.50
14+76 RT.	3	13.32
15+67 LT.	3	6.79
15+67 RT.	4	31.49
15+77 LT.	SPECIAL I	15.02
15+78 RT.	SPECIAL I	13.45

AMITY RD. WHEELCHAIR/BICYCLE RAMPS		
LOCATION	TYPE	AREA (SQ. YD.)
18+23 RT.	SPECIAL I	12.89
18+23 RT.	SPECIAL I	7.87
18+32 LT.	4	31.65
18+32 RT.	3	6.94
21+66 RT	3	10.28
20+94 RT.	3	10.20

C.L. AMITY RD.
P. I. = 10+81.32
Δ = 03°15'23" LT.
D = 04°00'00"
T = 40.71'
L = 81.40'
P.C. = 10+40.61
P.T. = 11+22.01
e = NO SUPER
Ls = NA

C.L. AMITY RD.
P. I. = 12+16.43
Δ = 11°53'28" RT.
D = 15°00'00"
T = 39.78'
L = 79.27'
P.C. = 11+76.65
P.T. = 12+55.93
e = NO SUPER
Ls = NA

C.L. AMITY RD.
P. I. = 13+62.29
Δ = 17°04'21" LT.
D = 17°00'00"
T = 50.59'
L = 100.43'
P.C. = 13+11.71
P.T. = 14+12.13
e = NO SUPER
Ls = NA

C.L. AMITY RD.
P. I. = 19+64.48
Δ = 25°07'38" RT.
D = 17°00'00"
T = 75.11'
L = 147.81'
P.C. = 18+89.37
P.T. = 20+37.17
e = NO SUPER
Ls = NA

C.L. AMITY RD.
P. I. = 21+21.00
Δ = 07°31'45" LT.
D = 11°00'00"
T = 34.27'
L = 68.45'
P.C. = 20+86.72
P.T. = 21+55.17
e = NO SUPER
Ls = NA

STATE OF ARKANSAS
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AMITY RD.

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WORKSPACE: AHTD
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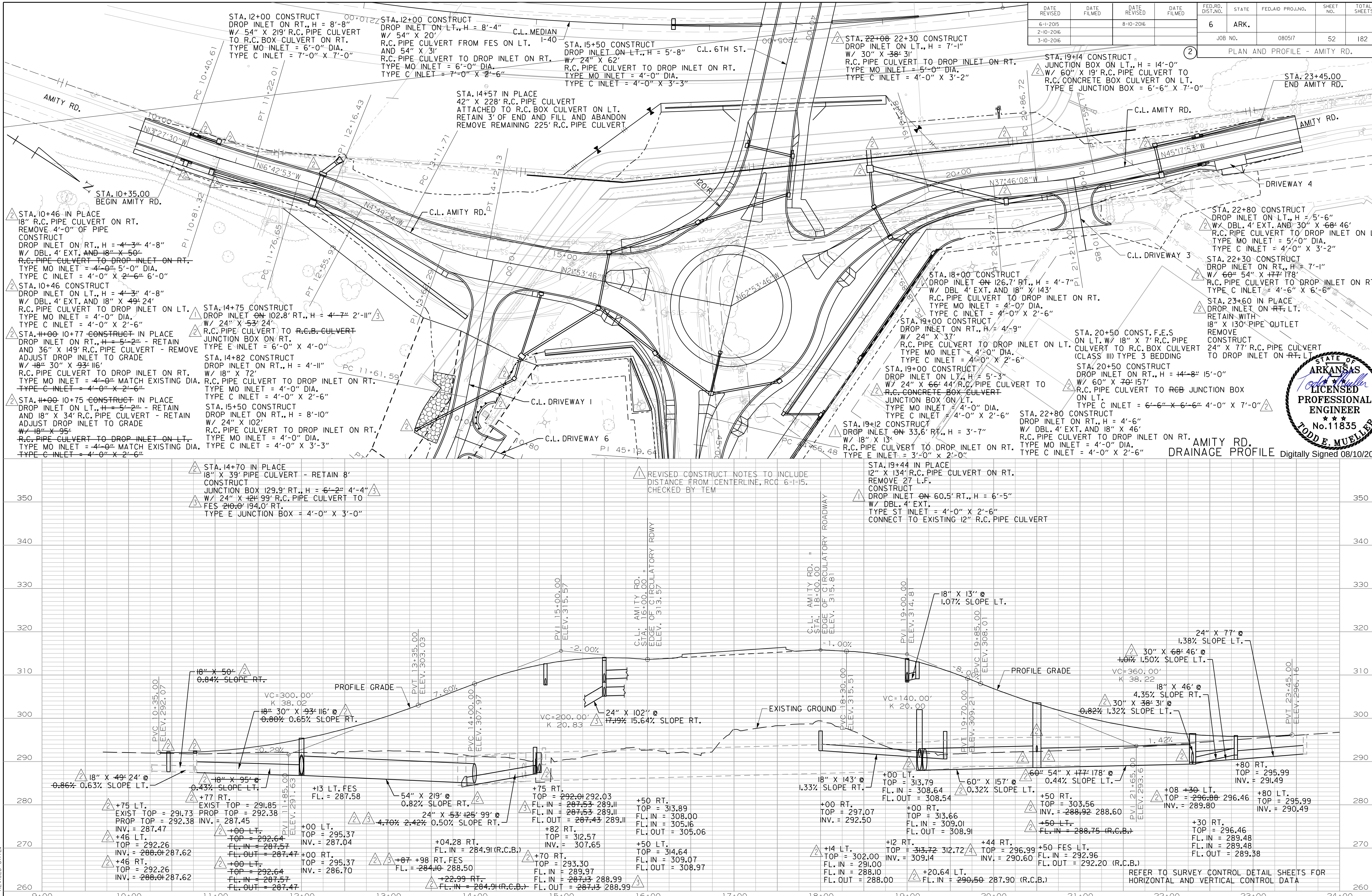
REVISED DATE:

REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA

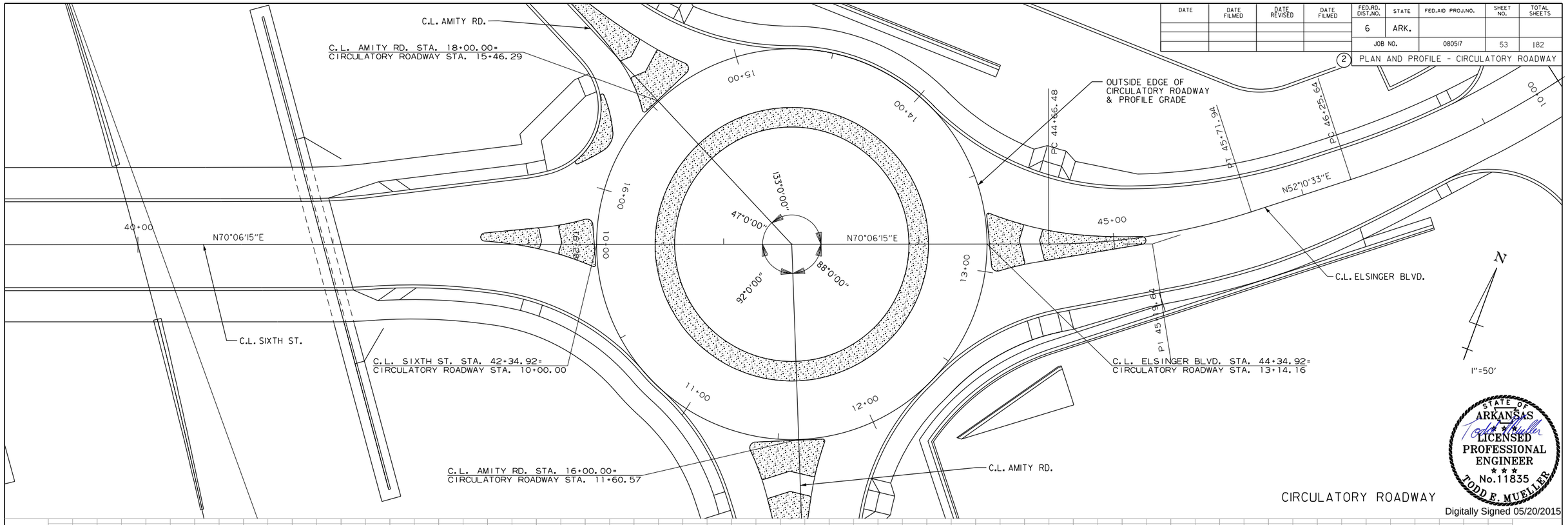


DATE REVISED 6-1-2015 2-10-2016 3-10-2016
DATE REVISED 8-10-2016
FED.RD. DIST.NO. 6 STATE ARK. FED.AID PROJ.NO. SHEET NO. 52 TOTAL SHEETS 182
JOB NO. 080517
PLAN AND PROFILE - AMITY RD.
STA. 12+00 CONSTRUCT DROP INLET ON RT., H = 8'-8" W/ 54" X 219' R.C. PIPE CULVERT TO R.C. BOX CULVERT ON RT. TYPE MO INLET = 6'-0" DIA. TYPE C INLET = 7'-0" X 7'-0"
STA. 12+00 CONSTRUCT DROP INLET ON LT., H = 8'-4" W/ 54" X 20' R.C. PIPE CULVERT FROM FES ON LT. AND 54" X 31' R.C. PIPE CULVERT TO DROP INLET ON RT. TYPE MO INLET = 6'-0" DIA. TYPE C INLET = 7'-0" X 2'-6"
C.L. MEDIAN I-40
STA. 15+50 CONSTRUCT DROP INLET ON LT., H = 5'-8" W/ 24" X 62' R.C. PIPE CULVERT TO DROP INLET ON RT. TYPE MO INLET = 4'-0" DIA. TYPE C INLET = 4'-0" X 3'-3"
C.L. 6TH ST.
STA. ~~22+08~~ 22+30 CONSTRUCT DROP INLET ON LT., H = 7'-1" W/ 30" X ~~38~~ 31' R.C. PIPE CULVERT TO DROP INLET ON RT. TYPE MO INLET = 5'-0" DIA. TYPE C INLET = 4'-0" X 3'-2"
STA. 19+14 CONSTRUCT JUNCTION BOX ON LT., H = 14'-0" W/ 60" X 19' R.C. PIPE CULVERT TO R.C. CONCRETE BOX CULVERT ON LT. TYPE E JUNCTION BOX = 6'-6" X 7'-0"
STA. 23+45.00 END AMITY RD.
STA. 14+57 IN PLACE 42" X 228' R.C. PIPE CULVERT ATTACHED TO R.C. BOX CULVERT ON LT. RETAIN 3' OF END AND FILL AND ABANDON REMOVE REMAINING 225' R.C. PIPE CULVERT
AMITY RD.
C.L. AMITY RD.
AMITY RD.
N13°27'30"W
N16°42'53"W
N4°49'24"W
N21°53'46"W
N62°53'46"W
N37°46'08"W
N45°17'53"W
120'R
DRIVEWAY 4
STA. 10+35.00 BEGIN AMITY RD.
C.L. AMITY RD.
STA. 10+46 IN PLACE 18" R.C. PIPE CULVERT ON RT. REMOVE 4'-0" OF PIPE CONSTRUCT DROP INLET ON RT., H = ~~4'-3"~~ 4'-8" W/ DBL. 4' EXT. ~~AND 18" X 50' R.C. PIPE CULVERT TO DROP INLET ON RT.~~ TYPE MO INLET = ~~4'-0"~~ 5'-0" DIA. TYPE C INLET = 4'-0" X ~~2'-6"~~ 6'-0"
STA. 10+46 CONSTRUCT DROP INLET ON LT., H = ~~4'-3"~~ 4'-8" W/ DBL. 4' EXT. AND 18" X ~~49~~ 24' R.C. PIPE CULVERT TO DROP INLET ON LT. TYPE MO INLET = 4'-0" DIA. TYPE C INLET = 4'-0" X 2'-6"
STA. ~~11+00~~ 10+77 ~~CONSTRUCT~~ IN PLACE DROP INLET ON RT., H = ~~5'-2"~~ - RETAIN AND 36" X 149' R.C. PIPE CULVERT - REMOVE ADJUST DROP INLET TO GRADE W/ ~~18"~~ 30" X ~~93~~ 116' R.C. PIPE CULVERT TO DROP INLET ON RT. TYPE MO INLET = ~~4'-0"~~ MATCH EXISTING DIA. ~~TYPE C INLET = 4'-0" X 2'-6"~~
STA. ~~11+00~~ 10+75 ~~CONSTRUCT~~ IN PLACE DROP INLET ON LT., H = ~~5'-2"~~ - RETAIN AND 18" X 34' R.C. PIPE CULVERT - RETAIN ADJUST DROP INLET TO GRADE ~~W/ 18" X 95' R.C. PIPE CULVERT TO DROP INLET ON LT.~~ TYPE MO INLET = ~~4'-0"~~ MATCH EXISTING DIA. ~~TYPE C INLET = 4'-0" X 2'-6"~~
STA. 14+75 CONSTRUCT DROP INLET ~~ON~~ 102.8' RT., H = ~~4'-7"~~ 2'-11" W/ 24" X ~~53~~ 24' R.C. PIPE CULVERT TO ~~R.C.B. CULVERT~~ JUNCTION BOX ON RT. TYPE E INLET = 6'-0" X 4'-0"
STA. 14+82 CONSTRUCT DROP INLET ON RT., H = 4'-11" W/ 18" X 72' R.C. PIPE CULVERT TO DROP INLET ON RT. TYPE MO INLET = 4'-0" DIA. TYPE C INLET = 4'-0" X 2'-6"
STA. 15+50 CONSTRUCT DROP INLET ON RT., H = 8'-10" W/ 24" X 102' R.C. PIPE CULVERT TO DROP INLET ON RT. TYPE MO INLET = 4'-0" DIA. TYPE C INLET = 4'-0" X 3'-3"
C.L. DRIVEWAY 1
C.L. DRIVEWAY 6
C.L. DRIVEWAY 3
STA. 18+00 CONSTRUCT DROP INLET ~~ON~~ 126.7' RT., H = 4'-7" W/ DBL 4' EXT. AND 18" X 143' R.C. PIPE CULVERT TO DROP INLET ON RT. TYPE C INLET = 4'-0" X 2'-6"
STA. 19+00 CONSTRUCT DROP INLET ON RT., H = 4'-9" W/ 24" X 37' R.C. PIPE CULVERT TO DROP INLET ON LT. TYPE MO INLET = 4'-0" DIA. TYPE C INLET = 4'-0" X 2'-6"
STA. 19+00 CONSTRUCT DROP INLET ON LT., H = 5'-3" W/ 24" X ~~66'~~ 44' R.C. PIPE CULVERT TO ~~R.C. CONCRETE BOX CULVERT~~ JUNCTION BOX ON LT. TYPE MO INLET = 4'-0" DIA. TYPE C INLET = 4'-0" X 2'-6"
STA. 19+12 CONSTRUCT DROP INLET ~~ON~~ 33.6' RT., H = 3'-7" W/ 18" X 13' R.C. PIPE CULVERT TO DROP INLET ON RT. TYPE E INLET = 3'-0" X 2'-0"
STA. 20+50 CONST. F.E.S ON LT. W/ 18" X 7' R.C. PIPE CULVERT TO R.C. BOX CULVERT (CLASS III) TYPE 3 BEDDING
STA. 20+50 CONSTRUCT DROP INLET ON RT., H = ~~14'-8"~~ 15'-0" W/ 60" X ~~70'~~ 157' R.C. PIPE CULVERT TO ~~RCB~~ JUNCTION BOX ON LT. TYPE C INLET = ~~6'-6" X 6'-6"~~ 4'-0" X 7'-0"
STA. 22+80 CONSTRUCT DROP INLET ON RT., H = 4'-6" W/ DBL. 4' EXT. AND 18" X 46' R.C. PIPE CULVERT TO DROP INLET ON RT. TYPE MO INLET = 4'-0" DIA. TYPE C INLET = 4'-0" X 2'-6"
STA. 22+80 CONSTRUCT DROP INLET ON LT., H = 5'-6" W/ DBL. 4' EXT. AND 30" X ~~68~~ 46' R.C. PIPE CULVERT TO DROP INLET ON LT. TYPE MO INLET = 5'-0" DIA. TYPE C INLET = 4'-0" X 3'-2"
STA. 22+30 CONSTRUCT DROP INLET ON RT., H = 7'-1" W/ ~~60"~~ 54" X ~~177'~~ 178' R.C. PIPE CULVERT TO DROP INLET ON RT. TYPE C INLET = 4'-6" X 6'-6"
STA. 23+60 IN PLACE DROP INLET ON ~~RT.~~ LT. RETAIN WITH 18" X 130' PIPE OUTLET REMOVE CONSTRUCT 24" X 77' R.C. PIPE CULVERT TO DROP INLET ON ~~RT.~~ LT.
STATE OF ARKANSAS LICENSED PROFESSIONAL ENGINEER No.11835 TODD E. MUELLER
Digitally Signed 08/10/2016
AMITY RD. DRAINAGE PROFILE
STA. 14+70 IN PLACE 18" X 39' PIPE CULVERT - RETAIN 8' CONSTRUCT JUNCTION BOX 129.9' RT., H = ~~6'-2"~~ 4'-4" W/ 24" X ~~121'~~ 99' R.C. PIPE CULVERT TO FES ~~210.0'~~ 194.0' RT. TYPE E JUNCTION BOX = 4'-0" X 3'-0"
REVISED CONSTRUCT NOTES TO INCLUDE DISTANCE FROM CENTERLINE. RCC 6-1-15. CHECKED BY TEM
STA. 19+44 IN PLACE 12" X 134' R.C. PIPE CULVERT ON RT. REMOVE 27 L.F. CONSTRUCT DROP INLET ~~ON~~ 60.5' RT., H = 6'-5" W/ DBL. 4' EXT. TYPE ST INLET = 4'-0" X 2'-6" CONNECT TO EXISTING 12" R.C. PIPE CULVERT
PVI 15+00.00 ELEV. 315.57
C.L. AMITY RD. STA. 16+00.00 = EDGE OF CIRCULATORY RDWY ELEV. 313.57
C.L. AMITY RD. STA. 18+00.00 = EDGE OF CIRCULATORY ROADWAY ELEV. 315.81
PVI 19+00.00 ELEV. 314.81
PVT 13+35.00 ELEV. 303.03
PVC 19+85.00 ELEV. 308.01
PVC 10+35.00 ELEV. 292.07
PVC 14+00.00 ELEV. 307.97
PVC 18+30.00 ELEV. 315.51
PVT 19+70.00 ELEV. 309.21
PVT 23+45.00 ELEV. 296.16
PVI 11+85.00 ELEV. 291.63
PVI 21+65.00 ELEV. 293.6
-2.00%
-1.00%
7.60%
-0.29%
-8.0%
1.42%
VC=300.00' K 38.02
VC=200.00' K 20.83
VC=140.00' K 20.00
VC=360.00' K 38.22
PROFILE GRADE
EXISTING GROUND
18" X 13' @ 1.07% SLOPE LT.
24" X 77' @ 1.38% SLOPE LT.
30" X ~~68'~~ 46' @ ~~1.0%~~ 1.50% SLOPE LT.
18" X 46' @ 4.35% SLOPE RT.
30" X ~~38'~~ 31' @ ~~0.82%~~ 1.32% SLOPE LT.
18" X 50' ~~0.84% SLOPE RT.~~
~~18"~~ 30" X ~~93'~~ 116' @ ~~0.80%~~ 0.65% SLOPE RT.
24" X 102" @ ~~17.19%~~ 15.64% SLOPE RT.
18" X ~~49'~~ 24' @ ~~0.86%~~ 0.63% SLOPE LT.
~~18" X 95' @ 0.43% SLOPE LT.~~
54" X 219' @ 0.82% SLOPE RT.
24" X ~~53'~~ ~~125'~~ 99' @ ~~4.70%~~ ~~2.42%~~ 0.50% SLOPE RT.
18" X 143' @ 1.33% SLOPE RT.
60" X 157' @ 0.32% SLOPE LT.
~~60"~~ 54" X ~~177'~~ 178' @ 0.44% SLOPE LT.
+75 LT. EXIST TOP = 291.73 PROP TOP = 292.38 INV. = 287.47
+46 LT. TOP = 292.26 INV. = ~~288.01~~ 287.62
+46 RT. TOP = 292.26 INV. = ~~288.01~~ 287.62
+77 RT. EXIST TOP = 291.85 PROP TOP = 292.38 INV. = 287.45
~~+00 LT. TOP = 292.64 FL. IN = 287.57 FL. OUT = 287.47~~
~~+00 LT. TOP = 292.64 FL. IN = 287.57 FL. OUT = 287.47~~
+13 LT. FES FL. = 287.58
+00 LT. TOP = 295.37 INV. = 287.04
+00 RT. TOP = 295.37 INV. = 286.70
~~+87~~ +98 RT. FES FL. = ~~284.10~~ 288.50
+04.28 RT. FL. IN = 284.91 (R.C.B.)
~~+22.99 RT. FL. IN = 284.91 (R.C.B.)~~
+75 RT. TOP = ~~292.01~~ 292.03 FL. IN = ~~287.53~~ 289.11 FL. IN = ~~287.53~~ 289.11 FL. OUT = ~~287.43~~ 289.11
+82 RT. TOP = 312.57 INV. = 307.65
+70 RT. TOP = 293.30 FL. IN = 289.97 FL. IN = ~~287.13~~ 288.99 FL. OUT = ~~287.13~~ 288.99
+50 RT. TOP = 313.89 FL. IN = 308.00 FL. IN = 305.16 FL. OUT = 305.06
+50 LT. TOP = 314.64 FL. IN = 309.07 FL. OUT = 308.97
+00 RT. TOP = 297.07 INV. = 292.50
+14 LT. TOP = 302.00 FL. IN = 291.00 FL. IN = 288.10 FL. OUT = 288.00
+00 LT. TOP = 313.79 FL. IN = 308.64 FL. OUT = 308.54
+00 RT. TOP = 313.66 FL. IN = 309.01 FL. OUT = 308.91
+12 RT. TOP = ~~313.72~~ 312.72 INV. = 309.14
+20.64 LT. FL. IN = ~~290.50~~ 287.90 (R.C.B.)
+44 RT. TOP = 296.99 INV. = 290.60
+50 RT. TOP = 303.56 INV. = ~~288.92~~ 288.60
~~+50 LT. FL. IN = 288.75 (R.C.B.)~~
+50 FES LT. FL. IN = 292.96 FL. OUT = 292.20 (R.C.B.)
+08 ~~+30~~ LT. TOP = ~~296.88~~ 296.46 INV. = 289.80
+30 LT. TOP = 296.46 FL. IN = 289.48 FL. IN = 289.48 FL. OUT = 289.38
+80 RT. TOP = 295.99 INV. = 291.49
+80 LT. TOP = 295.99 INV. = 290.49
REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA
350 340 330 320 310 300 290 280 270 260
9+00 10+00 11+00 12+00 13+00 14+00 15+00 16+00 17+00 18+00 19+00 20+00 21+00 22+00 23+00 24+00
$$USER$$ $$DATE$$ $$TIME$$ WORKSPACE: $$WORKSPACE$$ $$FILE$$ REVISED DATE:

DATE	DATE FILMED	DATE REVISED	DATE FILMED

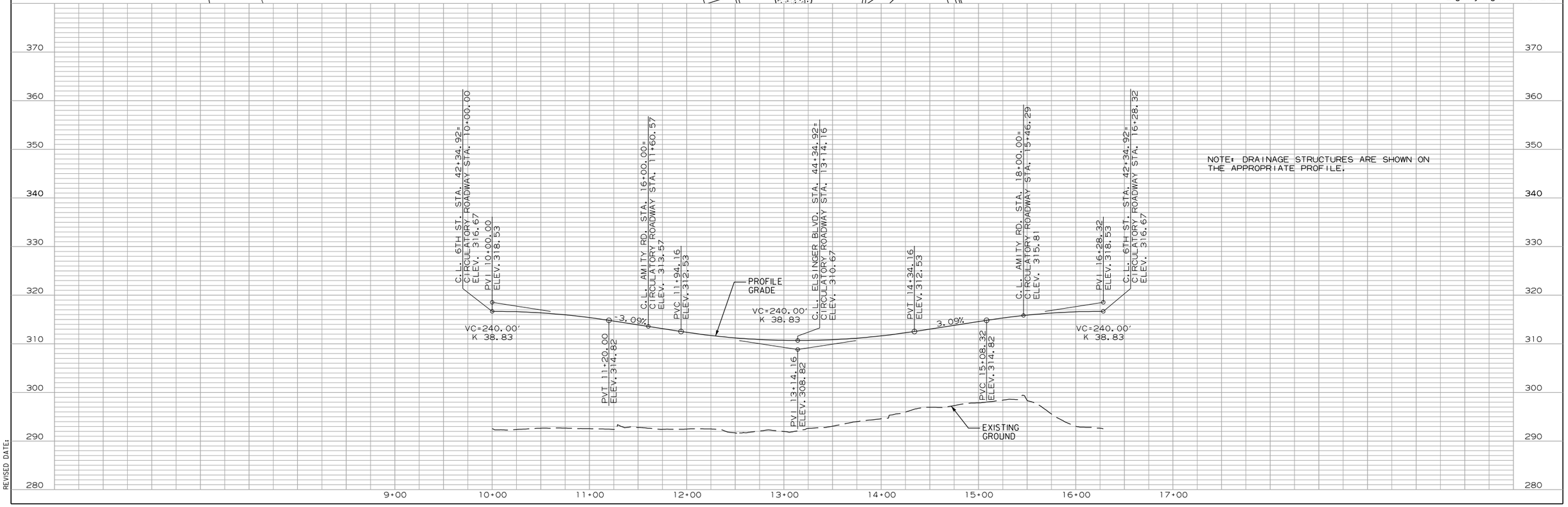
FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080517	53	182

(2) PLAN AND PROFILE - CIRCULATORY ROADWAY



STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.11835
TODD E. MUELLER
Digitally Signed 05/20/2015

CIRCULATORY ROADWAY

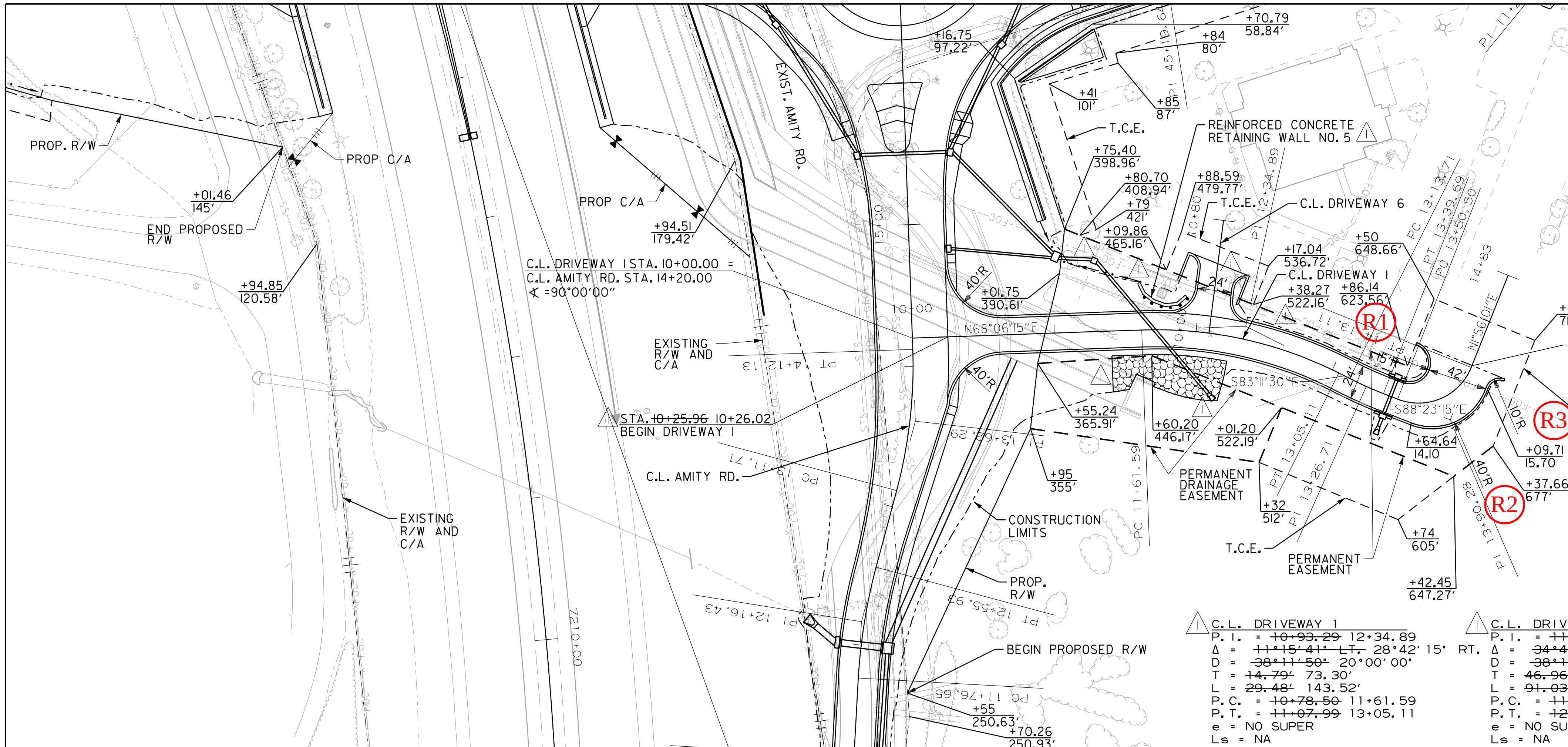


NOTE: DRAINAGE STRUCTURES ARE SHOWN ON THE APPROPRIATE PROFILE.

rccorbyn 5/20/2015 7:13:23 AM
WORKSPACE: AHTD
L:\2012\120175\90 - Cantrell Field Access\Drawings\6TH_ST\6TH_PP_CRC_01.dgn
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2-10-2016				6	ARK.			
				JOB NO.		080517	54	182

PLAN AND PROFILE - DRIVEWAY 1



STA. 11+40 TO 12+25 PLACE 205 TONS DUMPED RIPRAP

STA. ~~13+50~~ 13+45 CONSTRUCT DROP INLET ON LT. H = 4'-11" W/ DBL. 4' EXT. AND 24" X 27' R.C. PIPE CULVERT TO DROP INLET ON RT. TYPE MO INLET = 4'-0" DIA. TYPE C INLET = 4'-0" X 2'-6"

STA. ~~13+50~~ 13+45 CONSTRUCT DROP INLET ON RT. H = ~~5'-6"~~ 5'-4" W/ DBL. 4' EXT. AND 24" X 7' R.C. PIPE CULVERT TO FES ON RT. TYPE MO INLET = 4'-0" DIA. TYPE C INLET = 4'-0" X 2'-6"

STA. ~~12+06~~ 12+03 CONSTRUCT APPROACH ON LT. = ~~13~~ 10 CU. YD.

PIPE BOLLARD

STA.	OFF.	SIDE	TYPE	UNIT
11+64.05	22.89'	LT.	30" (TYPE SPECIAL)	1 EA.
11+68.90	18.65'	LT.	30" (TYPE SPECIAL)	1 EA.
11+75.19	16.24'	LT.	30" (TYPE SPECIAL)	1 EA.
11+81.37	15.86'	LT.	30" (TYPE SPECIAL)	1 EA.
11+87.65	17.66'	LT.	30" (TYPE SPECIAL)	1 EA.
11+92.45	22.48'	LT.	30" (TYPE SPECIAL)	1 EA.

C.L. DRIVEWAY 1
P.I. = ~~10+93.29~~ 12+34.89
Δ = ~~11°15'41" LT.~~ 28°42'15" RT.
D = ~~38°11'50"~~ 20°00'00"
T = ~~14.79'~~ 73.30'
L = ~~29.48'~~ 143.52'
P.C. = ~~10+78.50~~ 11+61.59
P.T. = ~~11+07.99~~ 13+05.11
e = NO SUPER
Ls = NA

C.L. DRIVEWAY 1
P.I. = ~~11+77.17~~ 13+26.71
Δ = ~~34°46'11" RT.~~ 5°11'45" RT.
D = ~~38°11'50"~~ 20°00'00"
T = ~~46.96'~~ 13.00'
L = ~~91.03'~~ 25.98'
P.C. = ~~11+30.20~~ 13+13.71
P.T. = ~~12+21.23~~ 13+39.69
e = NO SUPER
Ls = NA

C.L. DRIVEWAY 1
P.I. = ~~13+93.23~~ 13+90.27
Δ = 89°40'44" LT.
D = 143°14'22"
T = 39.78'
L = 62.61'
P.C. = ~~13+53.45~~ 13+50.50
P.T. = ~~14+16.06~~ 14+13.10
e = NO SUPER
Ls = NA

STATE OF ARKANSAS LICENSED PROFESSIONAL ENGINEER No. 11835 TODD E. MUELLER

DRIVEWAY 1

Digitally Signed 02/10/2016

CENTERPOINTS OF RADII

	RADIUS	STATION	OFFSET
R1	15'	13+48.65	27.00' LT.
R2	40'	13+86.26	20.84' LT.
R3	10'	14+07.72	25.59' RT.

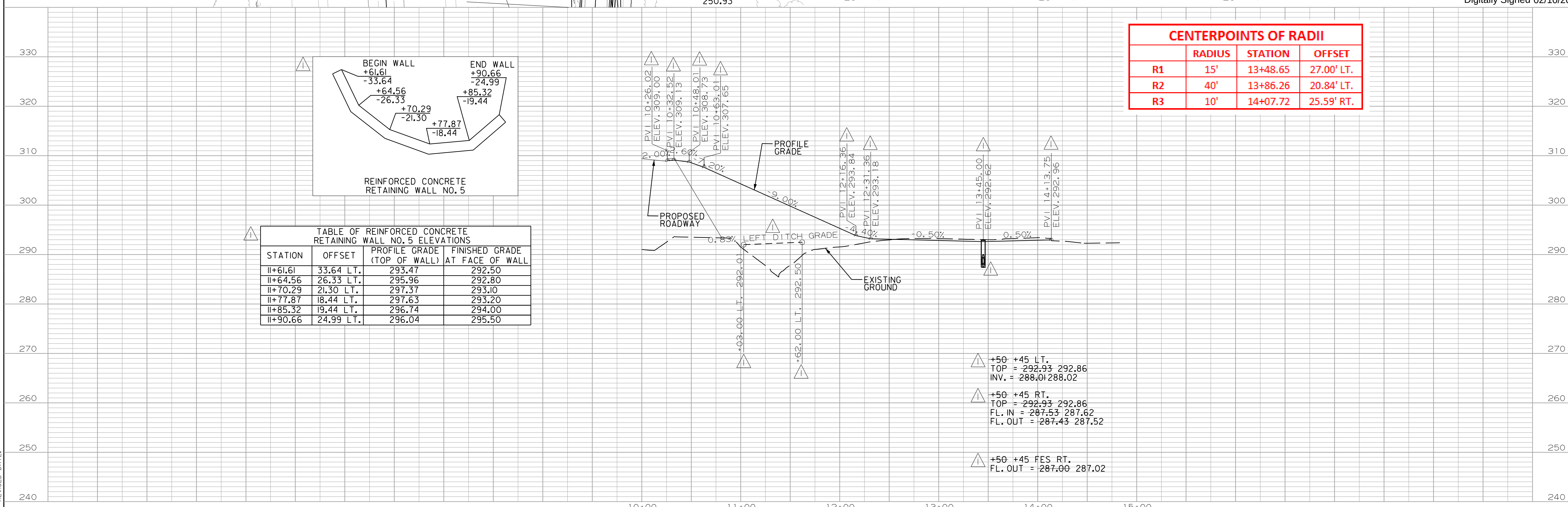


TABLE OF REINFORCED CONCRETE RETAINING WALL NO. 5 ELEVATIONS

STATION	OFFSET	PROFILE GRADE (TOP OF WALL)	FINISHED GRADE AT FACE OF WALL
11+61.61	33.64 LT.	293.47	292.50
11+64.56	26.33 LT.	295.96	292.80
11+70.29	21.30 LT.	297.37	293.10
11+77.87	18.44 LT.	297.63	293.20
11+85.32	19.44 LT.	296.74	294.00
11+90.66	24.99 LT.	296.04	295.50

~~+50~~ +45 LT.
TOP = ~~292.93~~ 292.86
INV. = ~~288.01~~ 288.02

~~+50~~ +45 RT.
TOP = ~~292.93~~ 292.86
FL. IN = ~~287.53~~ 287.62
FL. OUT = ~~287.43~~ 287.52

~~+50~~ +45 FES RT.
FL. OUT = ~~287.00~~ 287.02

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WORKSPACE: AHTD
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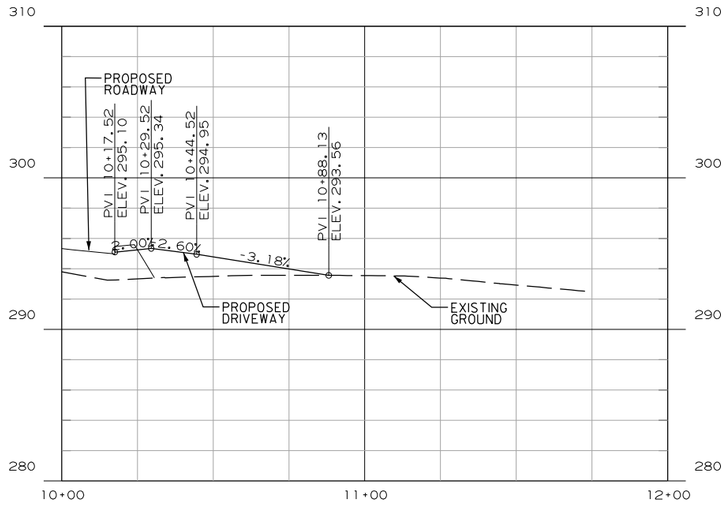
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED
2-10-2016			

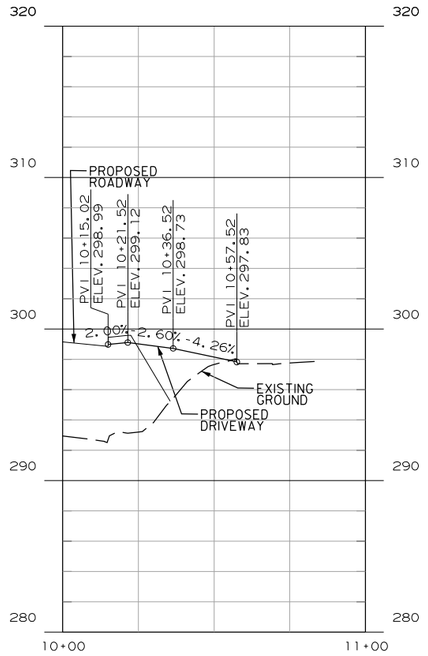
FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080517	55	182

(2) DRIVEWAY PROFILES

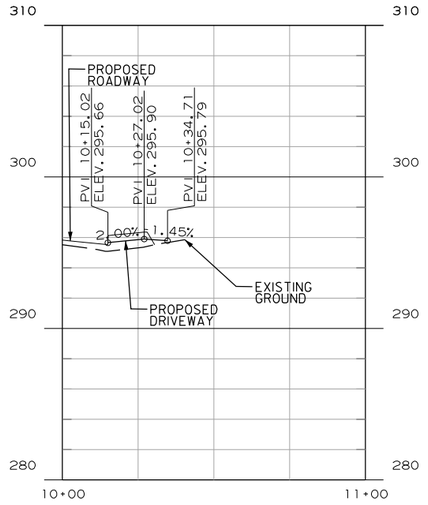
STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.11835
TODD E. MUELLER
Digitally Signed 02/10/2016



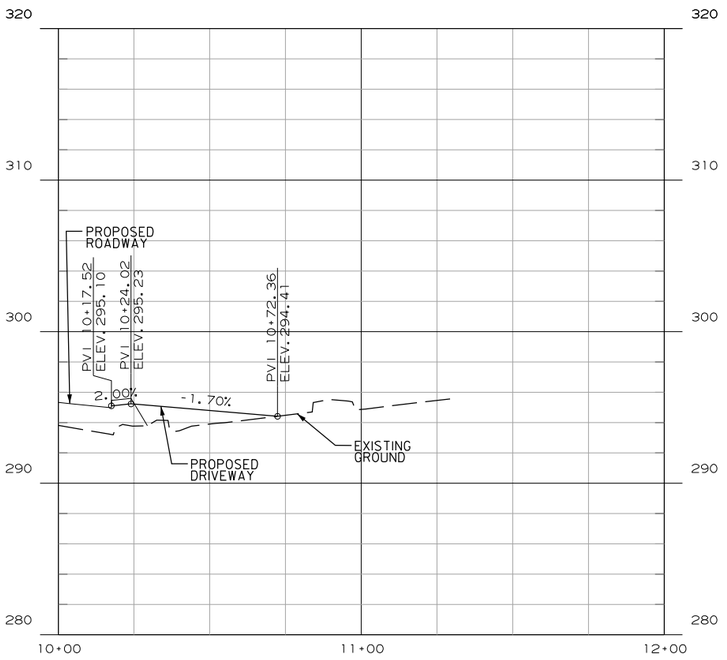
DRIVEWAY 2
ELSINGER BLVD. STA. 47+44 RT.



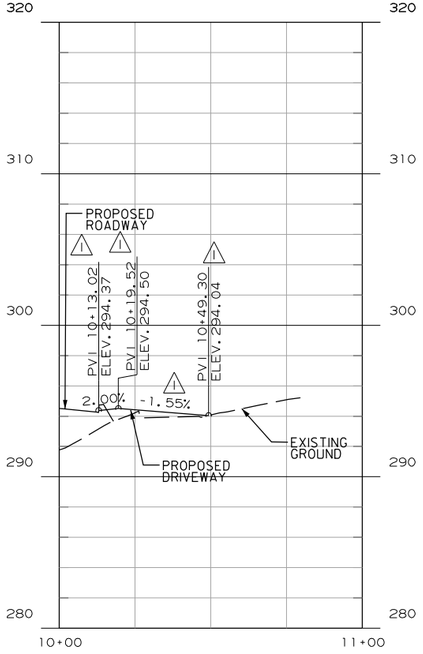
DRIVEWAY 3
AMITY RD. STA. 21+30



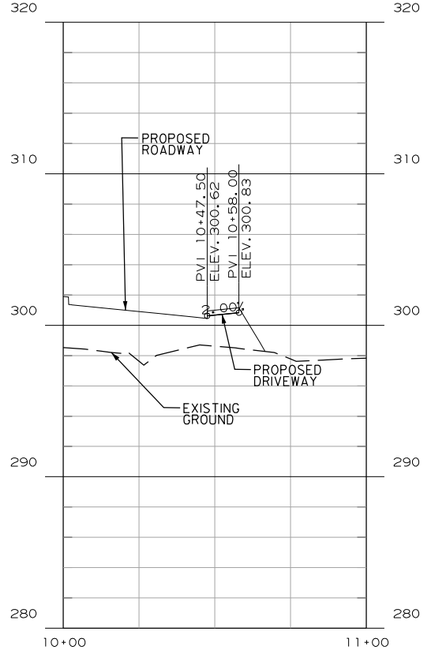
DRIVEWAY 4
AMITY RD. STA. 23+11



DRIVEWAY 5
ELSINGER BLVD. STA. 47+44 LT.



DRIVEWAY 6
DRIVEWAY 1 STA. ~~12+06~~ 12+09△1



DRIVEWAY 7
6TH ST. STA. 32+46 LT.

DRIVEWAY PROFILES

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WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2-10-2016				6	ARK.			
				JOB NO.		080517	56	182

2 PLAN AND PROFILE - MOT

⚠1 C.L. TEMPORARY DRIVEWAY
P.I. = ~~10+93.29~~ 12+34.89
Δ = ~~11°15'41" LT.~~ 28°42'15" RT.
D = ~~38°11'50"~~ 20°00'00"
T = ~~14.79'~~ 73.30'
L = ~~29.48'~~ 143.52'
P.C. = ~~10+78.50~~ 11+61.59
P.T. = ~~11+07.99~~ 13+05.11
e = NO SUPER
Ls = NA

⚠1 C.L. TEMPORARY DRIVEWAY
P.I. = ~~11+77.17~~ 13+26.71
Δ = ~~34°46'11" RT.~~ 5°11'45" RT.
D = ~~38°11'50"~~ 20°00'00"
T = ~~46.96'~~ 13.00'
L = ~~91.03'~~ 25.98'
P.C. = ~~11+30.20~~ 13+13.71
P.T. = ~~12+21.23~~ 13+39.69
e = NO SUPER
Ls = NA

⚠1 C.L. TEMPORARY DRIVEWAY
P.I. = ~~13+93.23~~ 13+90.27
Δ = 89°40'44" LT.
D = 143°14'22"
T = 39.78'
L = 62.61'
P.C. = ~~13+53.45~~ 13+50.50
P.T. = ~~14+16.06~~ 14+13.10
e = NO SUPER
Ls = NA

⚠1 C.L. TEMPORARY DRIVEWAY STA. ~~8+82.42~~ 8+81.74=
C.L. AMITY RD. DETOUR ~~STA. 15+14.30~~ 15+14.36
∢ = ~~95°52'30"~~ 87°02'32"

TEMPORARY DRIVEWAY
STA. 11+11 CONSTRUCT
DBL. 36" X 139' TEMP. CULVERT
QIO = 152 CFS DA = 80.3 ACRES

⚠1 STA. ~~12+30.00~~ 12+31.36
END TEMPORARY DRIVEWAY

PI 15+81.64
PT 15+61.63
PC 15+00.36
PI 13+07.17
PT 12+34.89
PC 13+13.71
PT 13+39.69
PC 13+50.50
PI 14+13.10
PT 13+57.10
PC 11+61.59
PI 13+26.71
PI 13+90.27
PT 13+05.11
PC 12+57.11
PI 13+57.10
PI 12+34.89
PI 10+47.48
PC 9+70.31
PT 11+23.53

10.00
15.00
25R
N68°06'15"E
2%
S83°11'30"E
S88°23'15"E
N41°03'10"W
N23°18'48"W
N30°18'45"W
N52°10'29"E
N

C.L. TEMPORARY DRIVEWAY
C.L. DRIVEWAY I
C.L. AMITY RD. DETOUR
C.L. MEDIAN I-40
C.L. EXIST. AMITY RD.
C.L. AMITY RD. DETOUR
AMITY RD.

TEMPORARY DRIVEWAY

⚠1 AMITY RD. DETOUR
~~STA. 13+70 INSTALL~~
~~DBL. 48" X 38' TEMPORARY CULVERT~~
~~QIO = 122 CFS DA = 53.3 AC~~

⚠1 AMITY RD. DETOUR
STA. 13+20 IN PLACE
DROP INLET ON RT.
RETAIN
WITH 48" X 3' PIPE TO FES
REMOVE
CONSTRUCT
42" X 66' TEMPORARY CULVERT
TO DITCH ON LT. AND
24" X 20' TEMPORARY CULVERT
TO DITCH ON RT.

⚠1 C.L. TEMPORARY DRIVEWAY STA. ~~8+82.42~~ 8+81.74=
C.L. AMITY RD. DETOUR STA. ~~15+14.30~~ 15+14.36
∢ = ~~84°07'30"~~ 87°02'32"

⚠1 STA. ~~10+02.14~~ 9+70.31
BEGIN AMITY RD. DETOUR

⚠1 C.L. AMITY RD. DETOUR
P.I. = ~~10+67.54~~ 10+47.48
Δ = ~~14°18'46" LT.~~ 16°51'15" LT.
D = 11°00'00"
T = ~~65.40'~~ 77.17'
L = ~~130.12'~~ 153.22'
P.C. = ~~10+02.14~~ 9+70.31
P.T. = ~~11+32.25~~ 11+23.53
e = NO SUPER
Ls = N/A

⚠1 C.L. AMITY RD. DETOUR
P.I. = 13+07.17
Δ = 6°59'58" RT.
D = 7°00'00"
T = 50.06'
L = 99.99'
P.C. = 12+57.11
P.T. = 13+57.10
e = NO SUPER
Ls = N/A

⚠1 C.L. AMITY RD. DETOUR
P.I. = ~~16+01.52~~ 15+81.64
Δ = ~~13°16'54" LT.~~ 17°44'22" LT.
D = 11°00'00"
T = ~~60.64'~~ 81.28'
L = ~~120.74'~~ 161.27'
P.C. = ~~15+40.88~~ 15+00.36
P.T. = ~~16+61.62~~ 16+61.63
e = NO SUPER
Ls = N/A

AMITY RD. DETOUR

STATE OF ARKANSAS
Todd E. Mueller
LICENSED PROFESSIONAL ENGINEER
No.11835
TODD E. MUELLER
Digitally Signed 02/10/2016

PVI 8+92.74 ELEV. 295.21
PVI 10+50.00 ELEV. 294.81
PVI 12+31.36 ELEV. 293.18
PVI 13+45.00 ELEV. 292.62
PVI 14+13.75 ELEV. 292.96
-0.25%
-0.90%
-0.50%
0.50%
TEMPORARY DRIVEWAY
SEE DRIVEWAY I PROFILE
AMTIY RD. DETOUR
EXISTING GROUND
STA. 11+11
FL. = 285.24 LT.
FL. = 284.73 RT.

TEMPORARY DRIVEWAY

PVI 11+20.96 ELEV. 291.42
PVC 11+50.00 ELEV. 291.33
PVI 12+00.00 ELEV. 291.16
PVT 12+50.00 ELEV. 292.41
PVC 12+70.00 ELEV. 292.91
PVI 13+20.00 ELEV. 294.16
PVT 13+70.00 ELEV. 294.49
VC = 100.00'
K 35.42
VC = 100.00'
K 54.08
-0.32%
0.50%
0.65%
24" X 20' Ø
9.85% SLOPE RT.
PROFILE GRADE
EXISTING GROUND
+49 LT.
FL. = 288.10 LT.
+43 RT.
FL. = 289.00 RT.
+30 RT.
EXISTING INLET
TOP = 292.35
FL. IN = 287.03
FL. IN = 287.03
~~STA 13+70~~
~~FL. = 287.89 LT. RT.~~
~~FL. = 288.48 RT. LT.~~

AMITY RD. DETOUR

310 300 290 280 270
9+00 10+00 11+00 12+00 13+00 14+00 15+00 16+00 17+00

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WORKSPACE: AHTD
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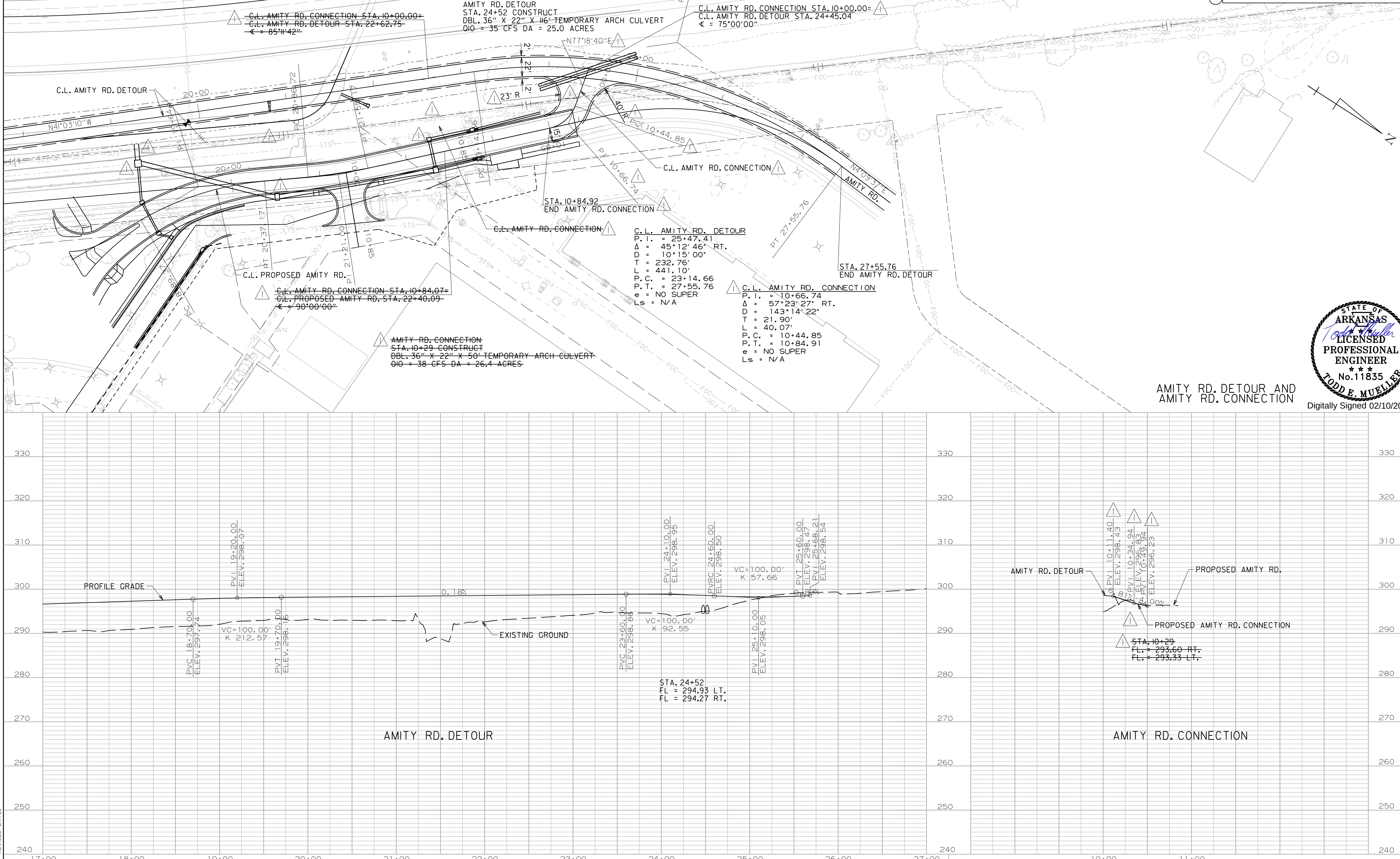
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2-10-2016				6	ARK.			
					JOB NO.	080517	57	182

PLAN AND PROFILE - MOT



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WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080517	58	182
				(2)	SIGNING QUANTITIES			

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8141
NICCI D. TINER

Digitally Signed 05/20/2015

STANDARD SIGN QUANTITIES U-CHANNEL POSTS

SIGN NO./LOCATION	U-CHANNEL POST ASSEMBLIES		
	U-1	U-2	U-2(A)
	EACH	EACH	EACH
SS-6TH-23-STA32+56SB	1		
SS-6TH-23-STA35+48WB	1		
SS-6TH-23-STA36+60WB	1		
SS-6TH-23-STA38+69EB	1		
SS-6TH-23-STA38+92EB	1		
SS-6TH-23-STA40+99WB	1		
SS-6TH-23-STA41+23WB	1		
SS-6TH-23-STA41+31EB	1		
SS-6TH-23-STA41+93EB			1
SS-6TH-23-STA42+04EB/WB			1
SS-6TH-23-STA42+13WB			1
SS-6TH-23-STA42+31EB			1
SS-6TH-23-STA42+31WB		1	
SS-6TH-23-STA42+34EB			1
SS-6TH-23-STA42+89EB		1	
SS-AMITY-23-STA9+86NB	1		
SS-AMITY-23-STA9+91SB	1		
SS-AMITY-23-STA10+49NB	1		
SS-AMITY-23-STA10+57SB	1		
SS-AMITY-23-STA11+47SB	1		
SS-AMITY-23-STA14+77NB	1		
SS-AMITY-23-STA15+54NB			1
SS-AMITY-23-STA15+69NB/SB			1
SS-AMITY-23-STA15+78SB			1
SS-AMITY-23-STA15+87NB			1
SS-AMITY-23-STA15+92SB		1	
SS-AMITY-23-STA15+95NB			1
SS-AMITY-23-STA16+48NB		1	
SS-AMITY-23-STA17+53SB		1	
SS-AMITY-23-STA18+04NB		1	
SS-AMITY-23-STA18+08SB			1
SS-AMITY-23-STA18+19SB			1
SS-AMITY-23-STA18+27NB			1
SS-AMITY-23-STA18+30NB/SB			1
SS-AMITY-23-STA18+42SB			1
SS-AMITY-23-STA21+97SB	1		
SS-AMITY-23-STA22+09NB	1		
SS-AMITY-23-STA23+43SB	1		
SS-DWY1-23-STA10+51WB	1		
SS-DWY1-23-STA14+12EB	1		
SS-DWY2-23-STA10+35WB	1		
SS-DWY3-23-STA10+24WB	1		
SS-ELSINGER-23-STA43+73WB		1	
SS-ELSINGER-23-STA44+39EB		1	
SS-ELSINGER-23-STA44+41WB			1
SS-ELSINGER-23-STA44+42WB			1
SS-ELSINGER-23-STA44+60EB			1
SS-ELSINGER-23-STA44+67EB/WB			1
SS-ELSINGER-23-STA44+79WB			1
SS-ELSINGER-23-STA45+56EB	1		
SS-ELSINGER-23-STA45+58WB	1		
TOTALS	23	8	20

STANDARD ROADSIDE SIGNS SHEET ALUMINUM 0.100" THICKNESS (5 SQ. FT. OR LESS)

STANDARD ROADSIDE SIGNS SHEET ALUMINUM 0.100" THICKNESS (5 SF OR LESS)					
SIGN NO.	SIZE OF SIGN	UNIT AREA (SQ. FT.)	QUANTITY REQUIRED	TOTAL SIGN AREA (SQ. FT.)	LEGEND/BACKGROUND
R2-1	24" x 30"	5.00	3	15.00	BLACK/WHITE
R3-17	24" x 30"	3.00	1	3.00	BLACK/WHITE
R3-17aP	24" x 30"	1.33	1	1.33	BLACK/WHITE
R4-7	24" x 30"	5.00	1	5.00	BLACK/WHITE
R6-1R	24" x 30"	3.00	1	3.00	BLACK/WHITE
W16-7pL	24" x 30"	2.00	8	16.00	BLACK/YELLOW
W16-7pR	24" x 30"	2.00	8	16.00	BLACK/YELLOW
OM3-L	24" x 30"	3.00	2	6.00	BLACK/YELLOW
OM3-R	24" x 30"	3.00	3	9.00	BLACK/YELLOW
TOTAL 0.100" THICKNESS				74.33	

STANDARD ROADSIDE SIGNS SHEET ALUMINUM 0.125" THICKNESS (GREATER THAN 5 SQ. FT.)

STANDARD ROADSIDE SIGNS SHEET ALUMINUM 0.125" THICKNESS (GREATER THAN 5 SF)					
SIGN NO.	SIZE OF SIGN	UNIT AREA (SQ. FT.)	QUANTITY REQUIRED	TOTAL SIGN AREA (SQ. FT.)	LEGEND/BACKGROUND
D1-2 (AMITY RD)	36" x 24"	6.00	2	12.00	WHITE/GREEN
D1-2 (ELSINGER BLVD)	36" x 24"	7.00	1	7.00	WHITE/GREEN
D1-2 (6TH ST)	36" x 24"	5.00	1	5.00	WHITE/GREEN
R1-1	36" x 24"	9.00	4	36.00	WHITE/RED
R1-2	36" x 24"	6.93	8	55.43	RED/WHITE
R3-8	36" x 24"	9.00	4	36.00	BLACK/WHITE
R4-11	36" x 24"	6.25	4	25.00	BLACK/WHITE
R6-4a	36" x 24"	8.00	4	32.00	BLACK/WHITE
R6-5P	36" x 24"	6.25	8	50.00	BLACK/WHITE
W11-2	36" x 24"	9.00	16	144.00	BLACK/YELLOW
TOTAL 0.125" THICKNESS				402.43	

QUANTITIES FOR INFORMATION ONLY

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080517	59	182

(2) SIGNING QUANTITIES

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8141
NICCI D. TINER

Digitally Signed 05/20/2015

SIGNING QUANTITIES
ROADSIDE MOUNTED I-BEAM SIGN SUPPORTS

SIGN NO./ LOCATION	STRUCTURE TYPE	SIGN				BREAKAWAY SIGN SUPPORT											EXIT NUMBER PANEL			
			GUIDE SIGN			STEEL SECT.		Sign Post Length			STUB POST			FOOTINGS			SIGN POST AND STUB	LEGEND	TYPE		
	TYPE	STANDARD SIGN	LENGTH	HEIGHT		A-572		H-1	H-2	H-3	H-1	H-2	H-3	DIA.	DEPTH	EMBED.			A	B	C
	G-2	SQ. FT.	FT.	FT.	SQ. FT.	BEAM	LBS	LIN FT			LIN FT			LIN FT			POUND		SQ. FT.		
GM-6TH-23-STA37+92EB	1		12.00	7.50	90.00	W8	18	14.25	16.5		5.33	5.33		3	7.5	5.00	745.39				
GM-AMITY-23-STA13+59NB	1		12.50	7.50	93.75	W8	18	15.5	18		5.66	5.66		3	8	5.33	806.89				
GM-AMITY-23-STA20+24SB	1		12.50	7.50	93.75	W8	18	15	16.5		5.00	5.00		2.5	7	4.67	746.89				
GM-ELSINGER-23-STA48+35WB	1		7.50	9.50	71.25	W8	18	18	18.5		5.33	5.33		3	7.5	5.00	848.89				
TOTALS:	**4**	**39.51**			**348.75**												**3148.06**		**0.00**	**0.00**	**0.00**

SIGNING SUMMARY OF QUANTITIES

ITEM NUMBER	ITEM	TOTAL	UNIT
SP & 725	GUIDE SIGN-ROADSIDE MOUNTED (DEMOUNTABLE LEGEND)	349	SQ. FT.
SP & 726	STANDARD SIGN	477	SQ. FT.
SP & 729	CHANNEL POST SIGN SUPPORT (TYPE U-1)	23	SQ. FT.
SP & 729	CHANNEL POST SIGN SUPPORT (TYPE U-2)	8	EACH
SP & 729	CHANNEL POST SIGN SUPPORT (TYPE U-2(A))	20	EACH
730	BREAKAWAY SIGN SUPPORT (TYPE G-2)	3148	POUND

QUANTITIES FOR INFORMATION ONLY

rccorbyn 5/20/2015 7:20:47 AM
WORKSPACE: AHTD
L:\2012\20171590 - Cantrell Field Access\Drawings\6TH_ST\6TH_SP_MNL_05.DGN
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
5-24-2016				6	ARK.			
				JOB NO.		080517	60	182
				(2)	PERMANENT SIGNING PLANS			

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8141
NICCI D. TINER

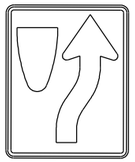
INSTALL SS-6TH-23-STA32+56SB
ONE WAY
MATCH LINE A
6TH ST.
N
100 50 0 100
Scale: 1" = 100'
AMITY RD.
INSTALL SS-DWY3-23-STAI0+24WB
STOP
INSTALL SS-AMITY-23-STA22+09NB
MAY USE FULL LANE
EXISTING SHOPPING DIRECTORY SIGN TO REMAIN STA. 21+62 NB
INSTALL SS-AMITY-23-STA23+43SB
MAY USE FULL LANE
SPEED LIMIT 35
REPLACE SS-AMITY-23-STA21+97SB
INSTALL SS-AMITY-23-STAI8+30NB/SB
INSTALL SS-AMITY-23-STAI8+42SB
INSTALL SS-AMITY-23-STAI8+04NB
RETAINING WALL
INSTALL GM-N.AMITY-23-STA20+24SB
Amity Rd NORTH
Elsinger Blvd EAST
6th St WEST
Amity Rd SOUTH
INSTALL SS-AMITY-23-STAI8+08SB
SS-AMITY-23STAI8+19SB
INSTALL SS-ELSINGER-23-STA43+73WB
INSTALL SS-AMITY-23-STAI8+27NB
INSTALL SS-ELSINGER-23-STA44+67EB/WB
INSTALL SS-AMITY-23-STAI7+53SB
INSTALL SS-ELSINGER-23-STA44+79WB
INSTALL SS-ELSINGER-23-STA44+41WB
SS-ELSINGER-23-STA44+42WB
YIELD
Amity Rd NORTH
6th St WEST
Amity Rd SOUTH
ELSINGER BL VD.
INSTALL GM-ELSINGER-23-STA46+30WB
STOP
REPLACE SS-DWY2-23-STAI0+35WB
INSTALL SS-ELSINGER-23-STA46+68EB
INSTALL SS-ELSINGER-23-STA45+58WB
INSTALL SS-ELSINGER-23-STA45+56EB
(SEE SPECIAL DETAIL FOR MOUNTING)
ONLY
INSTALL SS-AMITY-23-STAI6+48NB
INSTALL SS-ELSINGER-23-STA44+39EB
Elsinger Blvd
EXISTING RI-I TO BE REMOVED STA. 44+07 WB
RETAINING WALL
INSTALL SS-6TH-23-STA36+60WB
BIKE LANE AHEAD
INSTALL SS-6TH-23-STA42+13WB
INSTALL SS-6TH-23-STA40+99WB
INSTALL SS-6TH-23-STA42+31WB
INSTALL SS-6TH-23-STA35+48WB
INSTALL SS-6TH-23-STA38+69EB
INSTALL SS-AMITY-23-STAI5+87NB
SS-AMITY-23-STAI5+95NB
YIELD
INSTALL SS-AMITY-23-STAI5+54NB
INSTALL SS-ELSINGER-23-STA44+60EB
DRIVEWAY
STOP
INSTALL SS-DWYI-23-STAI4+12EB
INSTALL SS-AMITY-23-STAI4+77NB
ONLY
STOP
INSTALL SS-DWYI-23-STAI0+5IWB
INSTALL SS-AMITY-23-STAI5+69NB/SB
MATCH LINE A
6TH ST.
35+00
40+00
10+00
15+00
INSTALL SS-6TH-23-STA41+31EB
INSTALL SS-6TH-23-STA42+31EB
SS-6TH-23-STA42+34EB
YIELD
INSTALL SS-6TH-23-STA41+23WB
INSTALL SS-6TH-23-STA38+92EB
INSTALL SS-6TH-23-STA42+89EB
MATCH LINE B
AMITY RD.
EXISTING BILLBOARD TO REMAIN STA. 11+61NB
INSTALL SS-AMITY-23-STAII+47SB
REPLACE SS-AMITY-23-STAI0+49NB
SPEED LIMIT 35
REPLACE SS-AMITY-23-STAI0+57SB
SPEED LIMIT 35
MAY USE FULL LANE
MAY USE FULL LANE
INSTALL SS-AMITY-23-STA9+9ISB
INSTALL SS-AMITY-23-STA9+86NB
Amity Rd NORTH
Elsinger Rd EAST
Amity Rd SOUTH
INSTALL GM-6TH-23-STA37+92EB
INSTALL SS-6TH-23-STA42+04EB/WB
INSTALL SS-6TH-23-STA41+93EB
INSTALL SS-AMITY-23-STAI5+78SB
Amity Rd
INSTALL SS-AMITY-23-STAI5+92SB
EXISTING LOGAN'S ROADHOUSE SIGN TO BE REMOVED STA. 15+5INB
AMITY RD.
MATCH LINE B
Amity Rd NORTH
6th St WEST
Elsinger Blvd EAST
INSTALL GM-AMITY-23-STAI3+59NB

PERMANENT SIGNING PLANS

CEMcKinney 5/24/2016 2:04:00 PM
WORKSPACE: AHTD
L:\2012\2017590 - Cantrell Field Access\Drawings\6TH_ST\6TH_SP_MNL_01.dgn
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080517	61	182
				(2)	PERMANENT SIGNING PLANS			

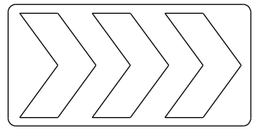
STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8141
NICCI D. TINER
Digitally Signed 05/20/2015



R4-7 (24"X30")
SS-6TH-23-STA35+48WB

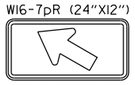
OM3-L (12"X36")
SS-6TH-23-STA38+69EB
SS-6TH-23-STA41+23WB

OM3-R (12"X36")
SS-6TH-23-STA38+92EB
SS-6TH-23-STA40+99WB
SS-AMITY-23-STAII+47SB

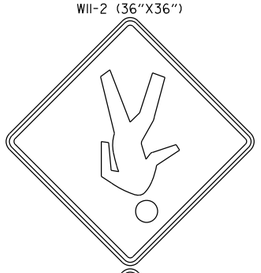


NOTE: THIS SIGN IS TO BE BLACK & WHITE
R6-4a (48"X24")
SS-6TH-23-STA42+89EB
SS-AMITY-23-STAI6+48NB
SS-ELSINGER-23-STA43+73WB
SS-AMITY-23-STAI7+53SB

W16-7pR (24"X12")



WII-2 (36"X36")

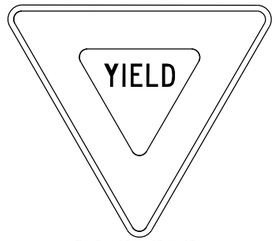


WII-2 (36"X36")

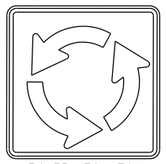
W16-7pR (24"X12")
SS-6TH-23-STA42+04EB/WB
SS-AMITY-23-STAI5+69NB/SB
SS-ELSINGER-23-STA44+67EB/WB
SS-AMITY-23-STAI8+30NB/SB

WII-2 (36"X36")

W16-7pL (24"X12")
SS-6TH-23-STA42+13WB
SS-6TH-23-STA41+93EB
SS-AMITY-23-STAI5+78SB
SS-AMITY-23-STAI5+54NB
SS-ELSINGER-23-STA44+60EB
SS-ELSINGER-23-STA44+79WB
SS-AMITY-23-STAI8+27NB
SS-AMITY-23-STAI8+42SB

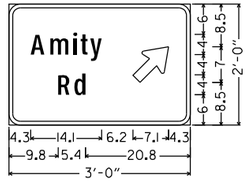


RI-2 (48"X48"X48")

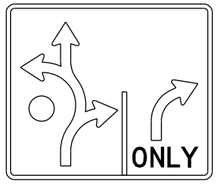


R6-5P (30"X30")
SS-6TH-23-STA42+31EB
SS-6TH-23-STA42+34EB
SS-AMITY-23-STAI5+87NB
SS-AMITY-23-STAI5+95NB
SS-ELSINGER-23-STA44+41WB
SS-ELSINGER-23-STA44+42WB
SS-AMITY-23-STAI8+08SB
SS-AMITY-23-STAI8+19SB

RI-2 (24"X30")
SS-AMITY-23-STA21+97SB
SS-AMITY-23-STAI0+57SB
SS-AMITY-23-STAI0+49NB



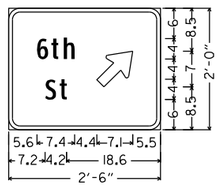
DI-2
2.25" Radius, 0.75" Border, White on Green;
[Amity] ClearviewHwy-2-W;
[Rd] ClearviewHwy-2-W;
Standard Arrow Custom 9.0" X 6.0" 45°;
SS-AMITY-23-STAI5+92SB
SS-AMITY-23-STAI8+04NB



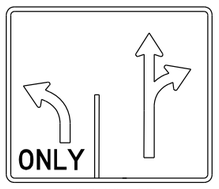
R3-8 (36"X36")
SS-AMITY-23-STAI4+77NB

R4-11 (30"X30")
SS-AMITY-23-STA23+43SB
SS-AMITY-23-STA22+09NB
SS-AMITY-23-STA9+91SB
SS-AMITY-23-STA9+86NB

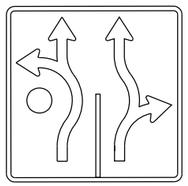
R6-1R (36"X12")
SS-6TH-23-STA32+56SB



DI-2
2.25" Radius, 0.75" Border, White on Green;
[6th] ClearviewHwy-2-W;
[St] ClearviewHwy-2-W;
Standard Arrow Custom 9.0" X 6.0" 45°;
SS-6TH-23-STA42+31WB



R3-8 (36"X36")
SS-ELSINGER-23-STA45+56EB

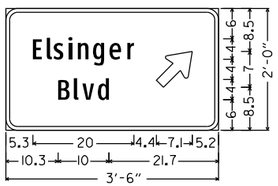


R3-8 (36"X36")
SS-6TH-23-STA41+31EB
SS-ELSINGER-23-STA45+58WB

R3-17 (24"X18")

R3-17aP (24"X8")
SS-6TH-23-STA36+60WB

RI-1 (36"X36")
SS-DWYI-23-STAI0+51WB
SS-DWYI-23-STAI4+12EB
SS-DWY2-23-STAI0+35WB
SS-DWY3-23-STAI0+24WB



DI-2
2.25" Radius, 0.75" Border, White on Green;
[Elsinger] ClearviewHwy-2-W;
[Blvd] ClearviewHwy-2-W;
Standard Arrow Custom 9.0" X 6.0" 45°;
SS-ELSINGER-23-STA44+39EB

PERMANENT SIGNING PLANS

rccarbyn 5/20/2015 7:13:34 AM
WORKSPACE: AHTD
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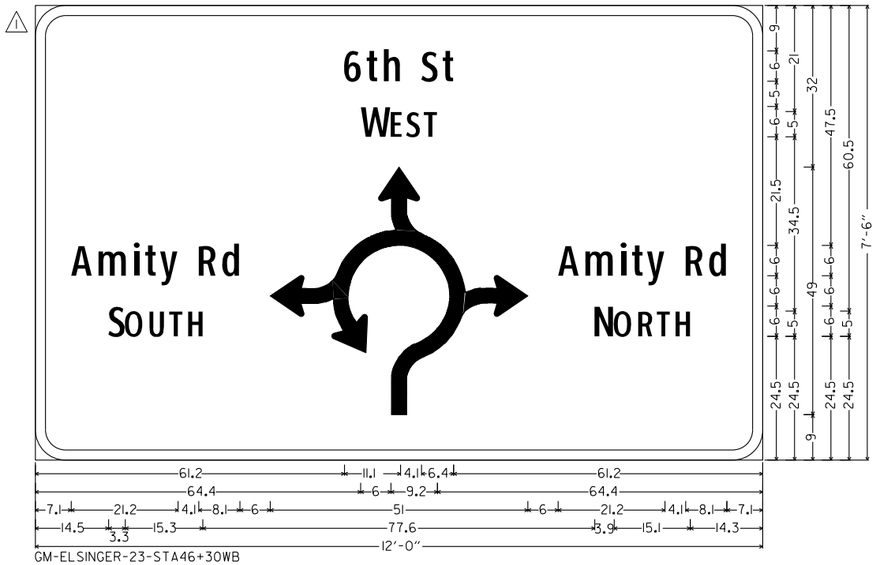
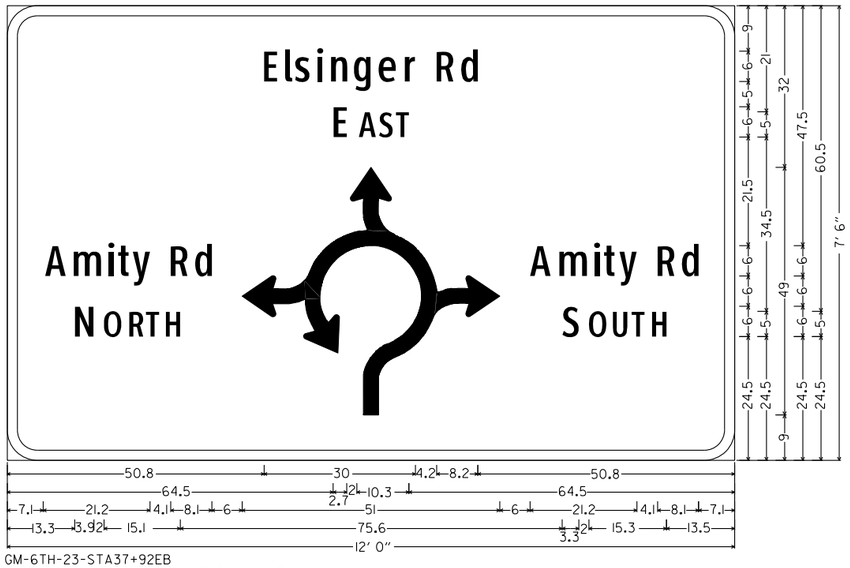
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
5-24-2016				6	ARK.			
				JOB NO.		080517	62	182
				(2)	PERMANENT SIGNING PLANS			

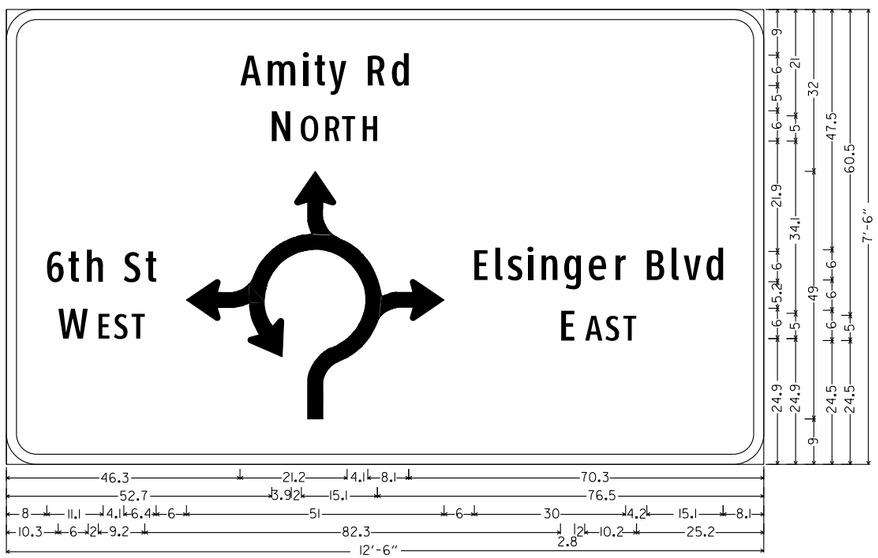
STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8141
NICCI D. TINER



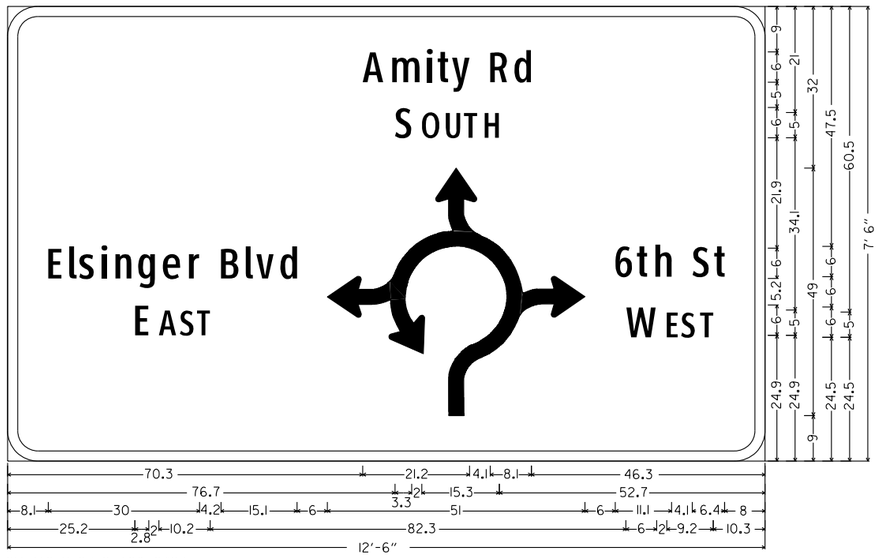
GM-ELSINGER-23-STA46+30WB
6.0" Radius, 2.0" Border, White on Green;
[6th St] ClearviewHwy-2-W;
[WEST] ClearviewHwy-2-W specified length;
[Amity Rd] ClearviewHwy-2-W;
[SOUTH] ClearviewHwy-2-W;
Circular Intersection Directional Arrow_6" Text;
[Amity Rd] ClearviewHwy-2-W;
[NORTH] ClearviewHwy-2-W;



GM-6TH-23-STA37+92EB
6.0" Radius, 2.0" Border, White on Green;
[Elsinger Rd] ClearviewHwy-2-W;
[EAST] ClearviewHwy-2-W;
[Amity Rd] ClearviewHwy-2-W;
[NORTH] ClearviewHwy-2-W;
Circular Intersection Directional Arrow_6" Text;
[Amity Rd] ClearviewHwy-2-W;
[SOUTH] ClearviewHwy-2-W;



GM-AMITY-23-STAI3+59NB
6.0" Radius, 2.0" Border, White on Green;
[Amity Rd] ClearviewHwy-2-W;
[NORTH] ClearviewHwy-2-W;
[6th St] ClearviewHwy-2-W;
[WEST] ClearviewHwy-2-W;
Circular Intersection Directional Arrow_6" Text;
[Elsinger Blvd] ClearviewHwy-2-W;
[EAST] ClearviewHwy-2-W;



GM-AMITY-23-STA20+24SB
6.0" Radius, 2.0" Border, White on Green;
[Amity Rd] ClearviewHwy-2-W;
[SOUTH] ClearviewHwy-2-W;
[Elsinger Blvd] ClearviewHwy-2-W;
[EAST] ClearviewHwy-2-W;
Circular Intersection Directional Arrow_6" Text;
[6th St] ClearviewHwy-2-W;
[WEST] ClearviewHwy-2-W;

PERMANENT SIGNING PLANS

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WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED
6-1-15			

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080517	63	182
① 07345		QUANTITIES		57062

SUMMARY OF ESTIMATED QUANTITIES FOR JOB 080517

BRIDGE NO. / CODE NO. / NAME PLATE TITLE	UNIT OF STRUCTURE	ITEM NO.	SP-2	SP-4	SP-5	SP-6	SP-6
		ITEM	BRIDGE CONSTRUCTION ①	STEEL PILING (HP12X53) ②	DRILLED SHAFT (78" DIA.)	CROSSHOLE SONIC LOGGING (78"DIA.)	CORING DRILLED SHAFT
		UNIT	LUMP SUM	LINEAR FOOT	LINEAR FOOT	EACH	LINEAR FOOT
07345 X771 INTERSTATE 40	BENT NO. 1			481			
	BENT NO. 2				112	4	40
	BENT NO. 3			442			
	212'-0" CONT. COMP. PLATE GIRDER UNIT		1				
TOTALS FOR JOB NO. 08517			1	923	112	4	40

① For estimated quantities to be included in the Lump Sum Bid for the item "BRIDGE CONSTRUCTION", see Table below.

② Steel piles are required to be Grade 50 and have special points which will not be paid for directly but shall be considered subsidiary to the item "STEEL PILING (HP12x53)". Any preboring required for the installation of the piles shall also be considered subsidiary to the item "STEEL PILING (HP12x53)".

③ ITEM "BRIDGE CONSTRUCTION"

BRIDGE NO. / CODE NO. / NAME PLATE TITLE	UNIT OF STRUCTURE	ITEM NO.	801	802	802	803	804	804	806	806	807	SP-8 & 807	808	809	812	816	SP-3	SP-7	SP-12
		ITEM	UNCLASSIFIED EXCAVATION FOR STRUCTURES-BRIDGE	CLASS S CONCRETE - BRIDGE	CLASS S(AE) CONCRETE - BRIDGE	CLASS I PROTECTIVE SURFACE TREATMENT	REINFORCING STEEL-BRIDGE (GRADE 60)	EPOXY COATED REINFORCING STEEL (GRADE 60)	METAL BRIDGE RAILING (TYPE H2)	TRANSITIONAL APPROACH RAILING	STRUCTURAL STEEL IN PLATE GIRDER SPANS (M270-GR. 50)	✱PAINTING STRUCTURAL STEEL	ELASTOMERIC BEARINGS	SILICONE JOINT SEALANT	BRIDGE NAME PLATE (TYPE D)	CONCRETE RIPRAP	TEXTURED COATING FINISH	ARCHITECTURAL FINISH	BRIDGE LIGHTING
		UNIT	CUBIC YARD	CUBIC YARD	CUBIC YARD	GALLON	POUND	POUND	LINEAR FOOT	EACH	POUND	TON	CUBIC INCH	LINEAR FOOT	EACH	CUBIC YARD	SQUARE YARD	SQUARE YARD	LUMP SUM
07345 X771 INTERSTATE 40	BENT NO. 1			95.16		0.2	11,332		16.0	2	1,421	0.7	5400.0	83		7	61.2	6.0	
	BENT NO. 2		92.0	220.64			~~44,216~~ 44,856 △1						7313.0				388.1	44.0	
	BENT NO. 3			96.00		0.2	11,332		16.0	2	1,421	0.7	5400.0	83		7	61.2	6.0	
	212'-0" CONT. COMP. PLATE GIRDER UNIT				719.60	37.1		154,810	394.0		540,438	270.2			1		526.5	106.0	1
TOTALS FOR JOB NO. 08517			92.0	411.80	719.60	37.5	~~66,880~~ 67,520 △1	154,810	426.0	4	543,280	271.6	18,113.0	166	1	14	1,037.0	162.0	1

✱ Paint shall conform to Federal Standard 595B, Color Chip No. 27038, Black.

③ The Summary of Estimated Bridge Quantities is provided for informational purposes only. This Summary is to be used only as a comparison to the Contractor's independent material take-off. The Contractor may not rely upon or make any claim against the Owner or the Engineer with respect to the accuracy of the estimated Bridge Quantities. The Contractor will remain solely responsible for the estimation of the materials necessary to complete the project.

△1 Revised reinforcing steel in Bent No. 2, DRG 6-1-15. Checked by JHR

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8017
JOHN H. RUDDELL

Digitally Signed 06/01/2015

BRIDGE ENGINEER

SCHEDULE OF BRIDGE QUANTITIES
I-40/6TH ST. OVERPASS
(CONWAY) (S)
FAULKNER COUNTY

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

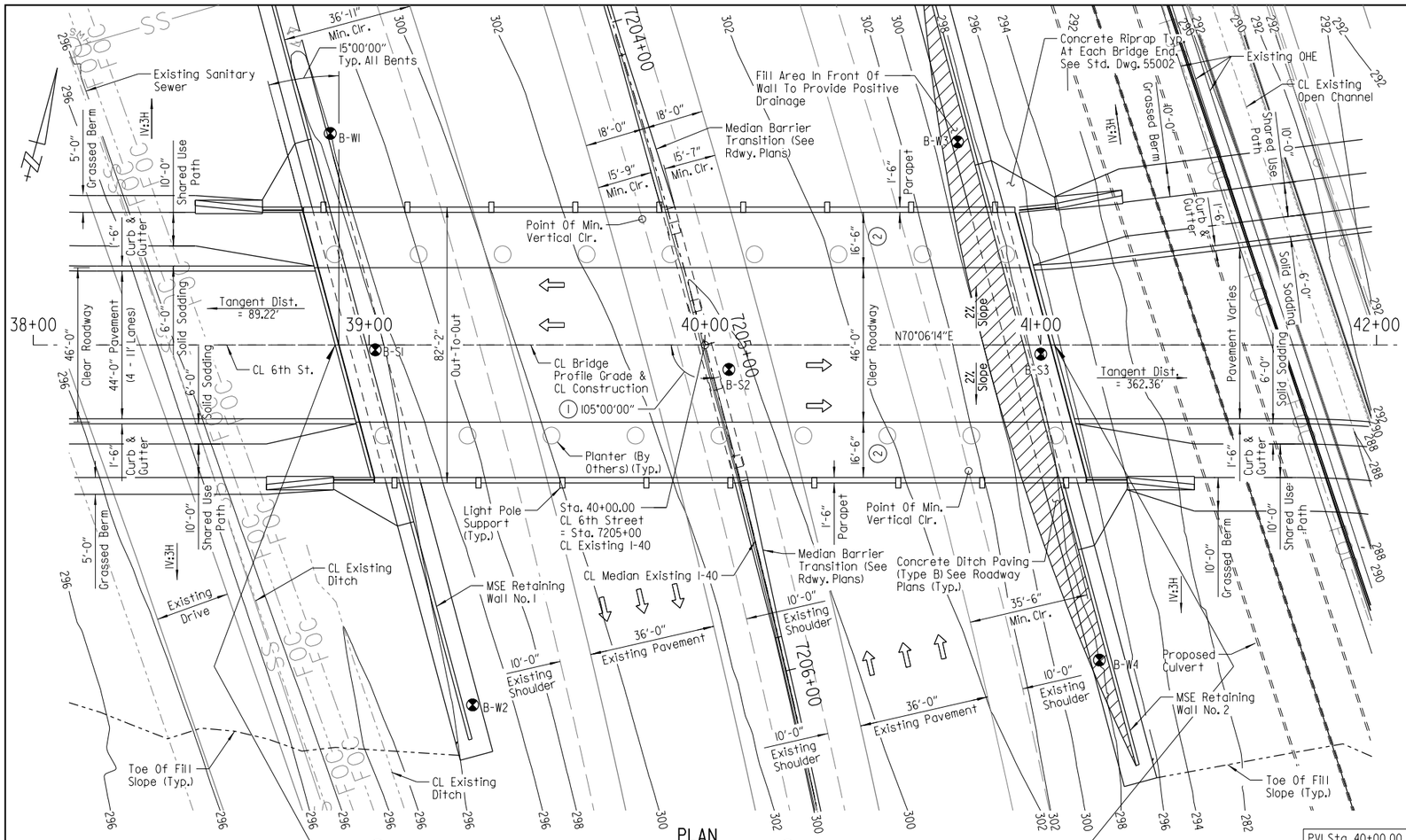
DRAWN BY: DRG DATE: MAR. 2015 FILENAME: B080517_0.dgn
CHECKED BY: JHR DATE: MAY 2015 SCALE: No Scale
DESIGNED BY: DRG DATE: MAR. 2015

BRIDGE NO. 07345 DRAWING NO. 57062

DRGOAD 6/1/2015 12:38 PM
WORKSPACE: AHTD Bridge
L:\2012\20171590 - Cantrell Field Access\Drawings\6TH_ST\B080517_0.dgn
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080517	64	182
① 07345		LAYOUT		57063



PLAN

① Measured from line tangent to CL Existing I-40 at Sta. 7205+00.

② 16'-6" total width established to accommodate future planters and 10'-0" Shared Use Path.

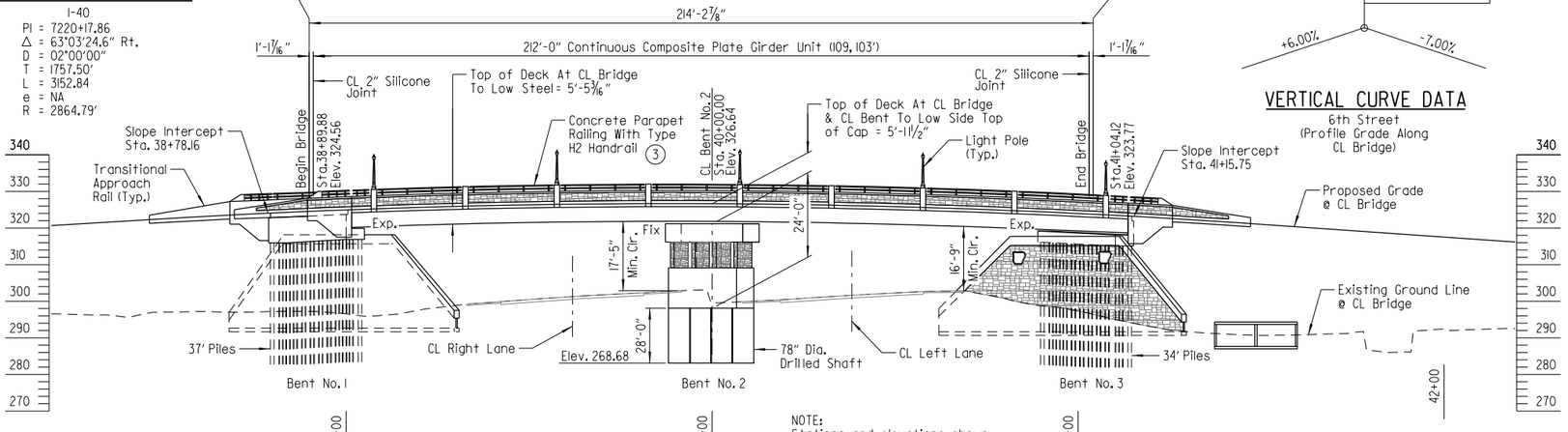
HORIZONTAL CURVE DATA

I-40
PI = 7220+17.86
Δ = 63°03'24.6" Rt.
D = 02°00'00"
T = 1757.50'
L = 3152.84
e = NA
R = 2864.79'

VERTICAL CURVE DATA

6th Street
(Profile Grade Along CL Bridge)

PVI Sta. 40+00.00
Elev. 331.51
V.C. = 300'
+6.00%
-7.00%



③ Ashlar Stone form liner to be applied to outside face of concrete parapet. See Dwg. No. 57085 for details.

ELEVATION

NOTE:
Stations and elevations shown are along CL Bridge. Elevations shown are at Working Point.

LEGEND

SS = Sanitary Sewer
OHE = Overhead Electric
FOC = Fiber Optic Line

GENERAL NOTES

BENCH MARK: PN: 4, PD: ⅝" Rebar With 2" Cap, ST: 39+36.75 OF: 36.35' RT. ZC: 298.242

CONSTRUCTION SPECIFICATIONS: Arkansas State Highway and Transportation Department Standard Specifications For Highway Construction (2014 Edition) with applicable Supplemental Specifications and Special Provisions. Unless otherwise noted in the plans, Section and Subsection refer to the Standard Construction Specifications.

DESIGN SPECIFICATIONS: AASHTO LRFD Bridge Design Specifications 6th Edition (2012).

LIVE LOADING: HL93

SEISMIC PERFORMANCE ZONE: I S_{DI} = 0.093 SITE CLASS: B

OPERATIONAL IMPORTANCE CATEGORY: TYPICAL

MATERIALS AND STRENGTHS:

Class S(AE) - Bridge Concrete (Superstructure)	f'c = 4,000 psi
Class S - Bridge Concrete (Substructure)	f'c = 3,500 psi
Reinforcing Steel (AASHTO M31 Or M322, Type A Gr. 60)	fy = 60,000 psi
Structural Steel (AASHTO M270, Gr. 50)	Fy = 50,000 psi
Structural Steel (AASHTO M270, Gr. 36)	Fy = 36,000 psi

FORM INSERT: State of Arkansas form insert shall be used on MSE walls (4 Locations). See Dwg. No. 57066.

PAINT: All structural steel except galvanized members, some surfaces in contact with concrete and as otherwise noted, shall be painted as specified in Subsection 807.75. The color of the paint shall be Black and shall match Federal Standard 595B, Color Chip No. 27038.

BORING LOGS: Boring logs may be obtained from the Engineer/Owner.

STEEL PILING: All Piling shall be HP12x53 (Grade 50) and shall be driven with an approved air, steam or diesel hammer to a minimum safe bearing capacity of 95 tons. Drive all piles to a minimum penetration of 10' below leveling pad. Lengths of piling shown are for estimating quantities and for use in determining payment for cut-off and build-up in accordance with Section 805. Actual lengths are to be determined in the field. The Contractor shall use approved steel H-pile driving points.

The Contractor may drive the piling in Bents 1 and 3 in one of the following sequences:

Piling may be driven after excavation to bottom of leveling pad is complete, after any required preboring and prior to backfilling.

Piling may be driven after embankment construction. Pile casings shall be used for all piling and shall be installed prior to or during embankment construction extending from bottom of leveling pad to bottom of cap. Pile casing material shall have sufficient strength to retain its original form free from harmful distortions after compaction of the fill material surrounding it. The minimum inside diameter of the casing shall be 18". Piles shall be driven through the open casings after embankment to bottom of cap is in place. After driving is completed, the pile casing shall be backfilled with an approved non-shrink grout or other approved material in a single continuous operation to completely fill voids. Pile casings and backfill will not be paid for directly but shall be considered subsidiary to the item "STEEL PILING (HP12x53)".

PREBORING: Preboring will be required at Bents 1 & 3 to obtain the minimum pile penetration requirements. Preboring shall take place after excavation to the top of leveling pad is complete. The size and depth of preboring will be determined by the Engineer. Preboring will be measured from bottom of leveling pad. The Contractor shall be responsible for keeping the prebored holes free from debris prior to backfilling which may require the use of temporary casings or other methods. After driving is completed, the prebored hole shall be backfilled with Class S Concrete to the top of rock and the remaining length of prebored holes shall be backfilled with an approved non-shrink grout, or other approved material to completely fill voids. The cost of preboring, temporary casings and backfill will be included in the item "STEEL PILING (HP12x53)".

DRILLED SHAFTS: All drilled shafts shall be founded a minimum of 13'-0" into moderately hard to hard dark gray shale as in the boring legend. No adjustment in plan tip elevation shall be made without prior approval from the Engineer. Methods of construction of the drilled shafts shall be in accordance with SP "DRILLED SHAFT FOUNDATIONS".

BRIDGE DECK: The concrete bridge deck shall be given a tine finish as specified for final finishing in Subsection 802.19 for Class 5 Tined Bridge Roadway Surface Finish. Sidewalk shall be given a broomed finish as specified for Class 6 Broomed Finish.

CLASS I PROTECTIVE SURFACE TREATMENT: Class I Protective Surface Treatment shall be applied to the roadway surface, face of curb and sidewalk surface.

TEXTURED COATING FINISH: Class 3 Textured Coating Finish shall be applied to all areas as specified in SP "TEXTURED COATING FINISH" and in accordance with Subsection 802.19(b)(3). Texture Coating Finish shall not be applied on surfaces where Class I Protective Surface Treatment is applied.

FOR R/W DATA, SEE ROADWAY PLANS

DETAIL DRAWINGS:	DRAWING NO:
End Bents	57070-57073
Intermediate Bent	57075-57077
212' Cont. Comp. Plate Girder Unit	57078-57088
Elastomeric Bearings	57089
Concrete Riprap	55002
Steel Piling	55020

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
JOHN H. RUDDELL
No. 8017

Digitally Signed 05/19/2015

BRIDGE ENGINEER

SHEET 1 OF 4
LAYOUT OF BRIDGE OVER I-40
I-40/6TH ST. OVERPASS
(CONWAY) (S)
FAULKNER COUNTY

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

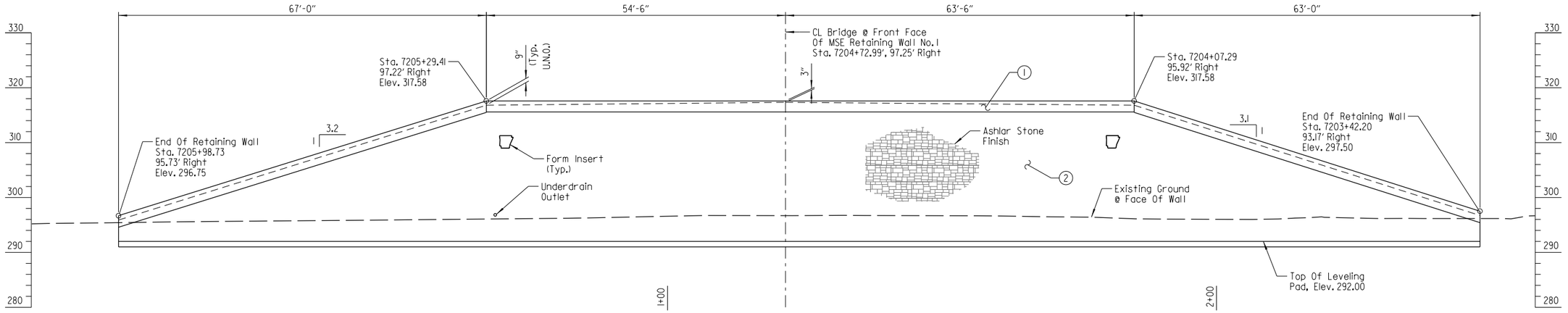
DRAWN BY: HEW DATE: SEPT. 2014 FILENAME: B080517_LI.dgn
CHECKED BY: DRG DATE: MAR. 2015 SCALE: 1" = 20'
DESIGNED BY: SRY DATE: SEPT. 2014

BRIDGE NO. 07345 DRAWING NO. 57063

DRGOAD 5/19/2015 7:27:16 PM
WORKSPACE: AHTD Bridge
L:\20(2\2017590 - Conf\Field Access\Drawings\6TH_ST\B080517_LI.dgn
REVISED DATE:

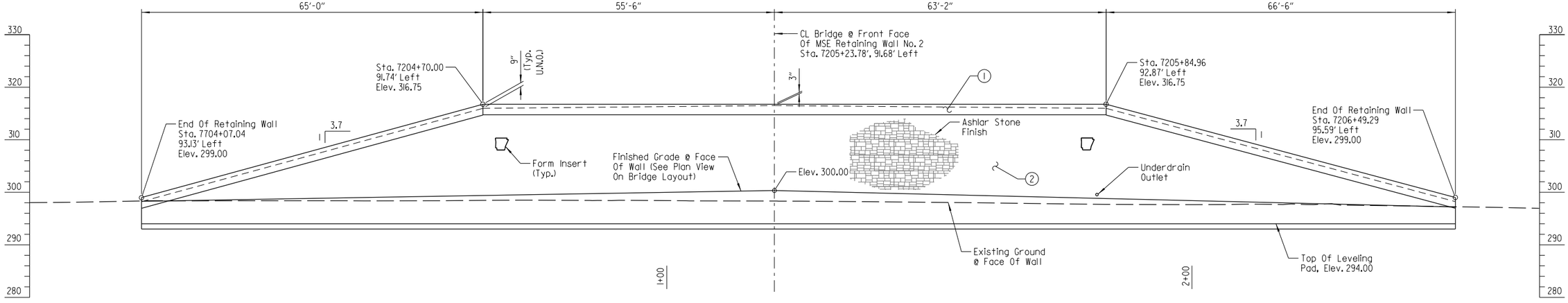
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080517	65	182
(1) 07345		LAYOUT		57064



ELEVATION - MSE RETAINING WALL NO. 1

(Looking At Front Face of Wall)
Scale: NTS



ELEVATION - MSE RETAINING WALL NO. 2

(Looking At Front Face of Wall)
Scale: NTS

NOTES:
For "SECTION A-A" & "SECTION B-B", see Dwg. No. 57065.

Stationing shown is along CL Median I-40 U.N.O.

Offset dimensions are measured from CL Median I-40 to outside vertical face of MSE Retaining Wall.

For "FORM INSERT DETAILS", see Dwg. No. 57066.

Underdrain outlet shall penetrate front face of MSE Retaining Wall.

For "GENERAL NOTES", see Dwg. No. 57065.

LEGEND

U.N.O. = Unless Noted Otherwise

(1) Class 3 Textured Coating Finish
(Color = Brown, Color Chip No. 33522)

(2) "Ashlar Stone" Pattern &
Class 3 Textured Coating Finish
(Color = Brown, Color Chip No. 30219)

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 8017
JOHN H. RUDDELL

Digitally Signed 05/19/2015

BRIDGE ENGINEER

SHEET 2 OF 4
LAYOUT OF BRIDGE OVER I-40
I-40/6TH ST. OVERPASS
(CONWAY) (S)
FAULKNER COUNTY

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

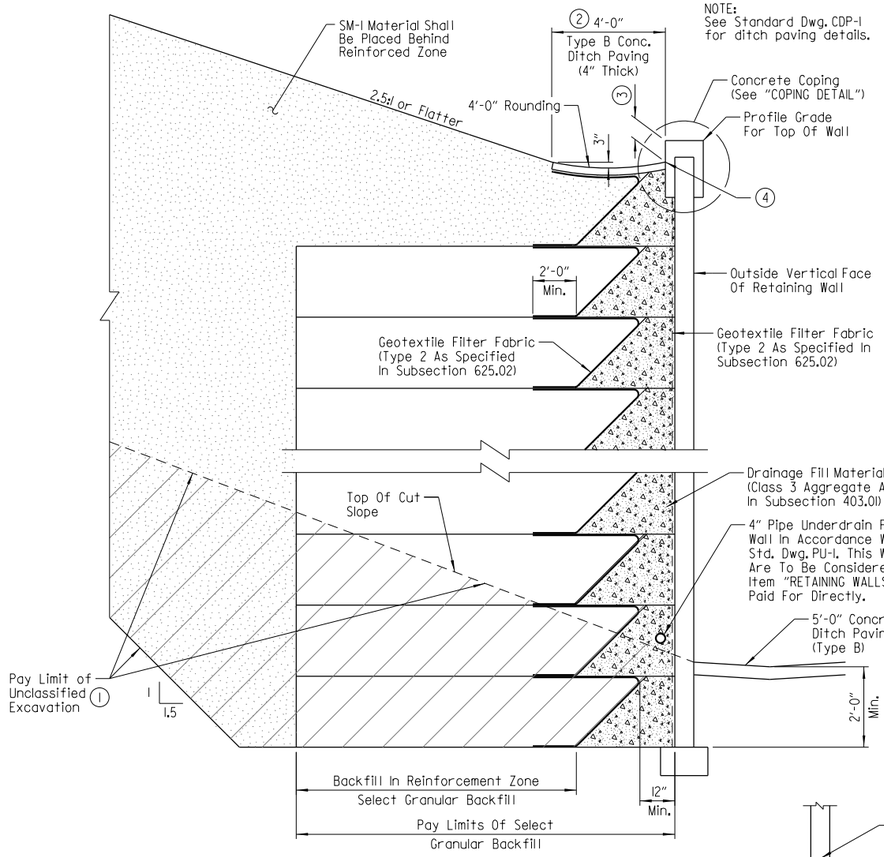
LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: SEPT. 2014 FILENAME: B080517_L2.dgn
CHECKED BY: DRG DATE: MAR. 2015 SCALE: As Shown
DESIGNED BY: SRY DATE: SEPT. 2014

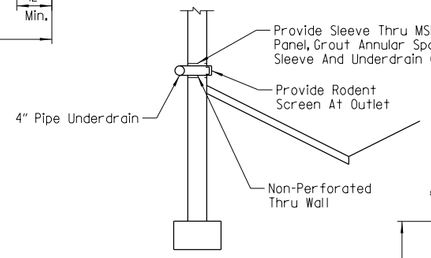
BRIDGE NO. 07345 DRAWING NO. 57064

DRGOAD 5/19/2015 7:27:17 PM
WORKSPACE: AHTD Bridge
L:\2012\2017590 - Cantrell Field Access\Drawings\6TH_ST\B080517_L2.dgn
REVISED DATE:

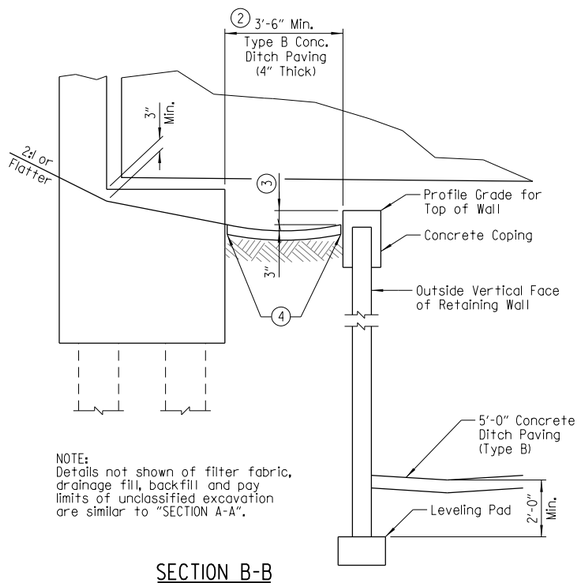
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080517	66	182
				(1) 07345		LAYOUT		57065



SECTION A-A
(Backfill Method A)
No Scale

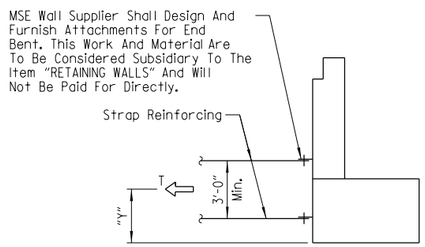


OUTLET DETAIL
Scale: NTS



NOTE:
Details not shown of filter fabric, drainage fill, backfill and pay limits of unclassified excavation are similar to "SECTION A-A".

SECTION B-B
Scale: NTS

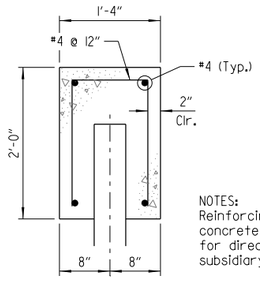


END BENT STRAP DETAIL
Scale: NTS

T = Resultant Force Required To Be Resisted By Strap Reinforcing

Y = Centroid Of Strap Reinforcing

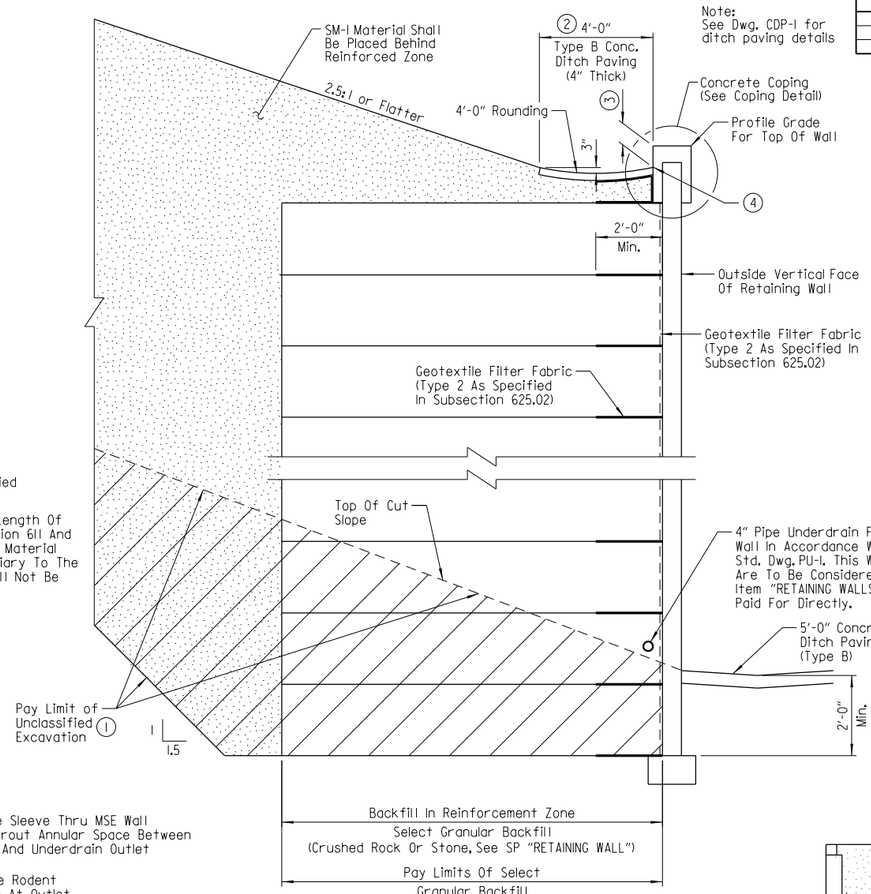
LIMIT STATE	T	Y
	Kips/Ft.	Ft.
Service	3.9	3.0
Strength	6.2	



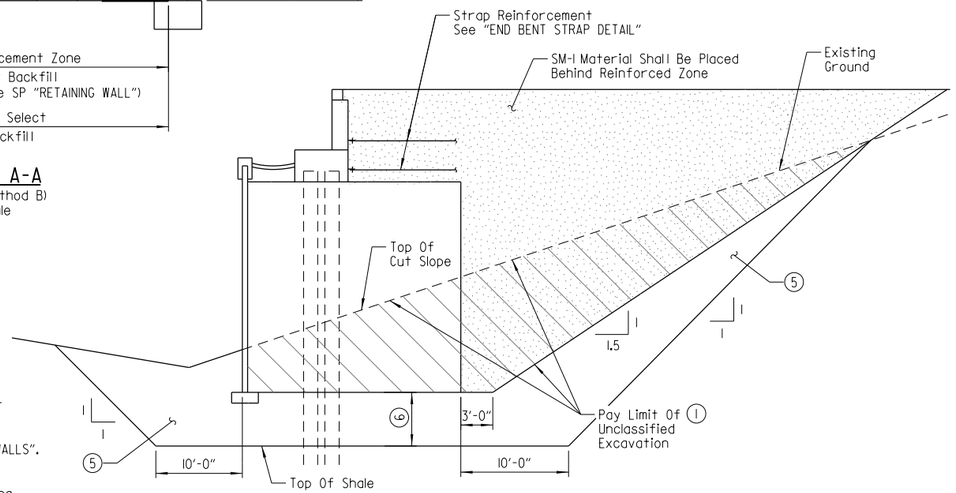
COPING DETAIL
Scale: NTS

NOTES:
Reinforcing steel and concrete for concrete coping shall not be paid for directly but will be considered subsidiary to the item "RETAINING WALLS".

Precast concrete coping may be substituted for cast-in-place coping shown.



SECTION A-A
(Backfill Method B)
No Scale



EMBANKMENT DETAIL
Scale: NTS

(1) Excavation required for reinforcing zone, leveling pad and placement of SM-1 material will be paid for under the pay item "UNCLASSIFIED EXCAVATION". See SP "RETAINING WALLS".

NOTE:
All backfill and drainage fill material within the reinforcement zone shall be included in the price bid for "SELECT GRANULAR BACKFILL".
Select material required behind reinforced zone shall be included in the price bid for "EMBANKMENT CONSTRUCTION". See SP "RETAINING WALLS".

(2) The concrete ditch paving shall be constructed without the 3" weep holes shown on Standard Dwg. CDP-1.

(3) Varies From 3" To 9", See ELEVATIONS.

(4) ½" Joint Filler (AASHTO M153, Type 1 Per Subsection 501.02(h)(1) With ½" x 1" Type 3 or 4 Joint Sealer Per Subsection 501.02(h)(2))

(5) For MSE Wall Nos. 1 & 2, SM-1 material shall be placed as undercut backfill. Excavation and backfill material for the undercut area shall be paid for under the pay item "MSE WALL UNDERCUT AND BACKFILL". See SP "RETAINING WALLS" for details.

(6) Depth of undercut varies from 1' to 9' as directed by the Engineer.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8017
JOHN H. RUDDELL

Digitally Signed 05/19/2015

BRIDGE ENGINEER

GENERAL NOTES:

DESIGN SPECIFICATIONS: AASHTO LRFD Bridge Design Specifications 6th Edition (2012) with Current Interim Revisions

SEISMIC PERFORMANCE ZONE: 1 SDI = 0.093 SITE CLASS: B

4" pipe underdrain shall maintain a minimum slope of ⅛" per foot toward nearest outlet.

Elevations are approximate. Wall dimensions may vary depending on wall design selected.

Placement of reinforcing straps for retaining walls may be affected by end bent construction. See Dwg. Nos. 57070 - 57073 for pile locations and wingwall details.

For ditch paving, see Standard Dwg. No. CDP-1.

See SP "RETAINING WALLS" for additional information.

Boring logs, including laboratory results, may be obtained from Programs and Contracts Division.

Joint filler, joint sealer, polystyrene foam board and rodent screen will not be paid for directly but will be considered subsidiary to SP "RETAINING WALLS".

A Class 3 Textured Coating Finish shall be applied to surfaces as specified in SP "TEXTURED COATING FINISH" and in accordance with Subsection 802.19.

SHEET 3 OF 4
LAYOUT OF BRIDGE OVER I-40
I-40/6TH ST. OVERPASS
(CONWAY) (S)
FAULKNER COUNTY

ROUTE SEC.

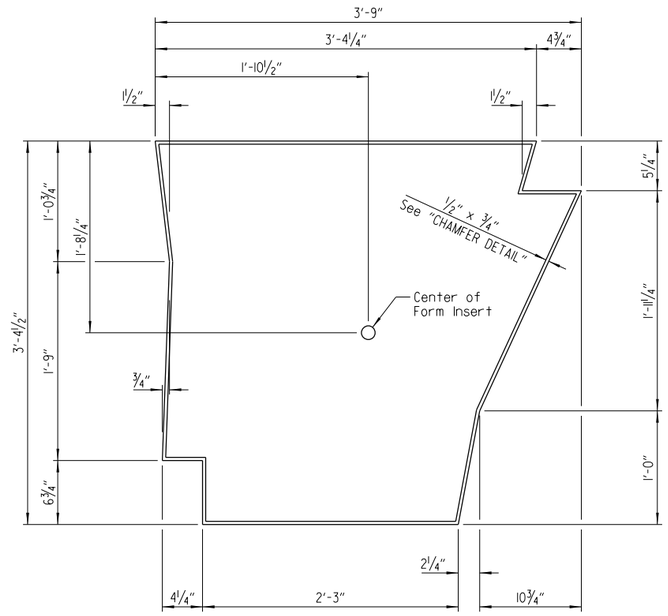
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: DRG DATE: MAR. 2015 FILENAME: B080517_L3.dgn
CHECKED BY: SRY DATE: MAY 2015 SCALE: As Shown
DESIGNED BY: DRG DATE: MAR. 2015
BRIDGE NO. 07345 DRAWING NO. 57065

DRGOAD 5/19/2015 7:27:18 PM
WORKSPACE: AHTD Bridge
L:\2012\2017590 - Cantrell Field Access\Drawings\6TH_ST\B080517_L3.dgn
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

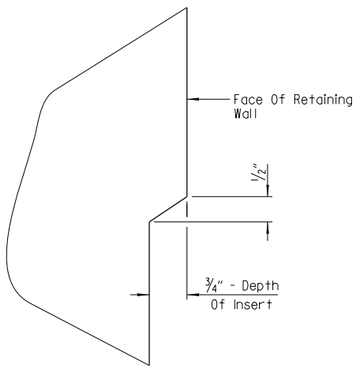
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080517	67	182
(1) 07345		LAYOUT		57066



NOTE:
Use form insert on designated walls as noted on Dwg. No. 57064.

FORM INSERT DETAILS AT MSE WALL

Scale: 1 1/2" = 1'-0"



CHAMFER DETAIL

Scale: NTS

NOTES:
Fabricate form insert as a one piece unit, without the use of splices, joints or glue.

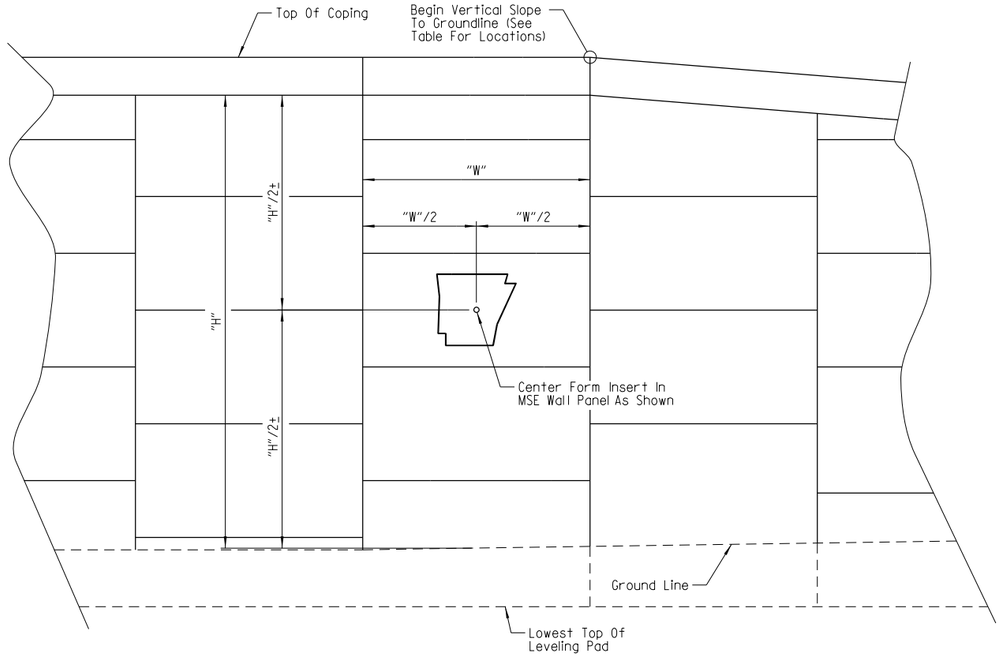
Wash and clean multi-use form inserts before each use.

All work and materials for inserts shall be included in the unit price bid for the item "RETAINING WALLS".

Damaged or worn form inserts shall be replaced at the Contractor's expense.

The form shall be approved by the Engineer before its use.

Recessed image (including chamfers) of State of Arkansas insert shall be given a Class 3 Textured Coating Finish as specified in SP "TEXTURED COATING FINISH."



DEVELOPED ELEVATION AT MSE WALL

Scale: NTS

LOCATION OF FORM INSERT	
Location	Station (1)
Retaining Wall 1	7205+29.41 And 7204+07.29
Retaining Wall 2	7204+70.00 And 7205+84.96

(1) Stations shown are along CL Median I-40.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 8017
JOHN H. RUDDELL

Digitally Signed 05/19/2015

BRIDGE ENGINEER

SHEET 4 OF 4
LAYOUT OF BRIDGE OVER I-40
I-40/6TH ST. OVERPASS
(CONWAY) (S)
FAULKNER COUNTY
ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: DRG DATE: MAR. 2015 FILENAME: B080517_L4.dgn
CHECKED BY: SRY DATE: MAY 2015 SCALE: As Shown
DESIGNED BY: DRG DATE: MAR. 2015

BRIDGE NO. 07345 DRAWING NO. 57066

DRGOAD 5/19/2015 7:27:19 PM
WORKSPACE: AHTD Bridge
L:\202\2017590 - Contrail\Field Access\Drawings\6TH_ST\B080517_L4.dgn
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080517	68	182
				(1) 07345		BORING LOGS		57067

14-053

Grubbs, Hoskyn, Barton & Wyatt, Inc. Consulting Engineers

LOG OF BORING NO. S1

6th Street over I-40
Conway, Arkansas

TYPE: Auger to 10 ft /Wash

LOCATION: Bent 1 – Approx Sta 39+00, CL

SURF. EL: 296±

DEPTH, FT	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	– No. 200 %	% Recovery	% ROD
	Very stiff dark brown fine sandy clay w/shale and sandstone fragments and some crushed stone (fill)	28					
5	Stiff reddish tan, gray and tan silty clay w/some shale and sandstone fragments (fill)	17					
	– soft below 4 ft	6			74		
10	Low hardness gray and tan moderately weathered shale w/medium close sandstone partings	27					
	– moderately hard below 8 ft	50/4"					
15		50/4"					
20		50/2"					
25	Moderately hard to hard dark gray shale, flat bedded	25/0"					
30	– with medium close sandstone partings below 28 ft	25/0"					
35		25/0"		qu = 4490 psi, TUW = 168 pcf		92	88
40				qu = 3260 psi, TUW = 149 pcf		73	73
45		25/0"					
50		25/0"					
55		25/0"					
60							

COMPLETION DEPTH: 60.0 ft
DATE: 11-13-14

DEPTH TO WATER IN BORING: Dry to 10 ft

DATE: 11/13/2014

RECROND20-2 14-053.GPJ 3-31-15

PLATE 3

14-053

Grubbs, Hoskyn, Barton & Wyatt, Inc. Consulting Engineers

LOG OF BORING NO. S2

6th Street over I-40
Conway, Arkansas

TYPE: Auger to 10 ft /Wash

LOCATION: Bent 2 – Approx Sta 40+05, CL

SURF. EL: 300±

DEPTH, FT	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	– No. 200 %
	3 inches: Asphalt Concrete (shoulder)	50/8"			
	21 inches: Crushed Stone Base (shoulder)	29			
5	Very stiff reddish tan, brown and gray silty clay w/some shale fragments (fill)	27			
	– with some crushed stone to 4 ft	14			90
10	– with less shale fragments and some silt pockets below 4 ft	50/10"			
	Stiff tan and reddish tan silty clay				
15	Moderately hard reddish tan, tan and gray moderately weathered shale	50/5"			
	– less weathered, reddish tan and dark gray below 13 ft				
20	Moderately hard to hard dark gray shale	50/2"			
25	– hard below 23 ft	25/0"			
30		25/0"			
35		25/0"			
40		25/0"			
45		25/0"			
50		25/0"			

COMPLETION DEPTH: 50.0 ft
DATE: 11-19-14

DEPTH TO WATER IN BORING: Dry to 10 ft

DATE: 11/19/2014

RECROND20-2 14-053.GPJ 3-31-15

USRHEW

PLATE 4

14-053

Grubbs, Hoskyn, Barton & Wyatt, Inc. Consulting Engineers

LOG OF BORING NO. S3

6th Street over I-40
Conway, Arkansas

TYPE: Auger to 10 ft /Wash

LOCATION: Bent 3 – Approx Sta 40+95, CL

SURF. EL: 298±

DEPTH, FT	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	– No. 200 %	% Recovery	% ROD
	24 inches: Crushed Stone Base (shoulder)	16					
	Stiff brown silty clay w/some shale and sandstone fragments (fill)	25/0"					
5	– with some cobbles at 2 ft	16					
	– slightly sandy to 4 ft	15			55		
10	– tan and grayish brown below 4 ft	50/8"					
	– very stiff below 8 ft						
15	Moderately hard reddish brown, tan and gray moderately weathered shale	50/6"					
20	– grayish brown and dark gray, slightly weathered below 18 ft	50/2"					
25	Moderately hard to hard dark gray shale w/medium close sandstone partings, flat bedded	25/0"					
30		25/0"					
35		25/0"		qu = 3070 psi, TUW = 165 pcf		89	53
40				qu = 3070 psi, TUW = 163 pcf			
45				qu = 3490 psi, TUW = 164 pcf		100	78
50		25/0"					
55							

COMPLETION DEPTH: 50.0 ft
DATE: 11-12-14

DEPTH TO WATER IN BORING: Dry to 10 ft

DATE: 11/12/2014

RECROND20-2 14-053.GPJ 3-31-15

PLATE 5

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8017
JOHN H. RUDDELL

Digitally Signed 05/19/2015

BRIDGE ENGINEER

SHEET 1 OF 3
BORING LOG DETAILS
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: MAR. 2015 FILENAME: B080517_BLI.dgn
CHECKED BY: DRG DATE: MAR. 2015 SCALE: As Shown
DESIGNED BY: - DATE: -

BRIDGE NO. 07345 DRAWING NO. 57067

DRGOAD 5/19/2015 7:27:27 PM
WORKSPACE: AHTD Bridge
L:\2012\20171590 - Cantrell Field Access\Drawings\6TH_ST\B080517_BLI.dgn
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080517	69	182
				(1) 07345		BORING LOGS		57068

14-053

Grubbs, Hoskyn, Barton & Wyatt, Inc. Consulting Engineers

LOG OF BORING NO. W1

6th Street over I-40
Conway, Arkansas

TYPE: Auger LOCATION: Wall No. 1 – Approx Sta 38+90, 60 ft Lt

SURF. EL: 295±

DEPTH, FT	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4)	PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	% No. 200
	18 inches: Crushed Stone Base (shoulder)	19				
	Stiff gray and reddish tan silty clay w/numerous shale fragments (fill)	15				21
5	– tan and gray below 4 ft	12				
	Stiff tan, gray and reddish tan silty clay w/trace shale fragments – ferrous stains and nodules below 6 ft	13				64
	Moderately hard tan, dark gray and gray moderately weathered shale	50/7"				
10						
		50/3"				
15						
		50/0"				
20						
25						

COMPLETION DEPTH: 18.5 ft
DATE: 11-17-14
DEPTH TO WATER IN BORING: Dry
DATE: 11/17/2014

LGBROW 1-053.GPJ 3-31-15

PLATE 6

14-053

Grubbs, Hoskyn, Barton & Wyatt, Inc. Consulting Engineers

LOG OF BORING NO. W2

6th Street over I-40
Conway, Arkansas

TYPE: Auger LOCATION: Wall No. 1 – Approx Sta 39+25, 100 ft Rt

SURF. EL: 296±

DEPTH, FT	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4)	PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	% No. 200
	18 inches: Crushed Stone Base (shoulder)	22				
	Stiff tan, gray, brown and reddish tan silty clay w/some shale fragments (fill)	15				
5	– very soft, reddish tan with less shale fragments and occasional silt pockets below 4 ft	3				83
	– firm, gray, tan and reddish tan with trace shale fragments and occasional fine sandy clay pockets below 6 ft	7				
10	Stiff dark gray, gray and reddish tan silty clay w/shale fragments and numerous ferrous nodules and stains	21				20
	Moderately hard tan, dark gray and gray moderately weathered shale	50/8"				
15						
	– slightly weathered, tan and dark gray below 18 ft	30/0"				
20						
25						

COMPLETION DEPTH: 18.5 ft
DATE: 11-17-14
DEPTH TO WATER IN BORING: Dry
DATE: 11/17/2014

LGBROW 1-053.GPJ 3-31-15

PLATE 7

DRGOAD 5/19/2015 7:27:28 PM
WORKSPACE: AHTD Bridge
L:\2012\12017590 - Confrell Field Access\Drawings\6TH_ST\B080517_BL2.dgn
REVISED DATE:

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8017
JOHN H. RUDDELL

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BRIDGE ENGINEER

SHEET 2 OF 3
BORING LOG DETAILS
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: MAR. 2015 FILENAME: B080517_BL2.dgn
CHECKED BY: DRG DATE: MAR. 2015 SCALE: As Shown
DESIGNED BY: - DATE: -

BRIDGE NO. 07345 DRAWING NO. 57068

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080517	70	182
				(1) 07345		BORING LOGS		57069

14-053

Grubbs, Hoskyn, Barton & Wyatt, Inc. Consulting Engineers

LOG OF BORING NO. W3

6th Street over I-40
Conway, Arkansas

TYPE: Auger LOCATION: Wall No. 2 – Approx Sta 40+80, 70 ft Lt

SURF. EL: 296±

DEPTH, FT	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	% No. 200
	24 inches: Crushed Stone Base (shoulder)	20			
	Medium dense reddish tan silty fine sand w/occasional clay pockets (fill)	12			25
5	Firm brown, gray and reddish tan silty clay w/numerous shale fragments (fill)	8			19
	– stiff with occasional clay pockets below 6 ft	18			
10	– tan, brown and gray below 8 ft	13			
15	Moderately hard dark gray, gray and tan moderately weathered shale	50/5"			
		50/2"			
20					
25					

COMPLETION DEPTH: 19.0 ft
DATE: 11-14-14
DEPTH TO WATER IN BORING: Dry
DATE: 11/14/2014

LOGNEW 14-053.GPJ 3-31-15

PLATE 8

14-053

Grubbs, Hoskyn, Barton & Wyatt, Inc. Consulting Engineers

LOG OF BORING NO. W4

6th Street over I-40
Conway, Arkansas

TYPE: Auger LOCATION: Wall No. 2 – Approx Sta 41+15, 90 ft Rt

SURF. EL: 298±

DEPTH, FT	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	% No. 200
	18 inches: Crushed Stone Base w/asphalt concrete seal coat (shoulder)				
	Medium dense reddish tan silty fine sand w/occasional clay pockets and trace shale fragments (fill)	20			
5	Stiff reddish tan, tan and gray silty clay w/some shale fragments (fill)	16			
		11			
10	Soft tan and reddish tan silty clay w/occasional fine sandy silt pockets	6			82
15	Low hardness reddish tan and gray highly weathered shale w/occasional silty clay seams and layers	48			
	Moderately hard dark gray, gray and tan moderately weathered shale	50/5"			
20					
25					

COMPLETION DEPTH: 19.0 ft
DATE: 11-14-14
DEPTH TO WATER IN BORING: Dry
DATE: 11/14/2014

LOGNEW 14-053.GPJ 3-31-15

PLATE 9

DRGOAD 5/19/2015 7:27:33 PM
WORKSPACE: AHTD Bridge
L:\202\201\590 - Cantrell Field Access\Drawings\6TH_ST\B080517_BL3.dgn
REVISED DATE:

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
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BRIDGE ENGINEER

SHEET 3 OF 3
BORING LOG DETAILS

ROUTE SEC.

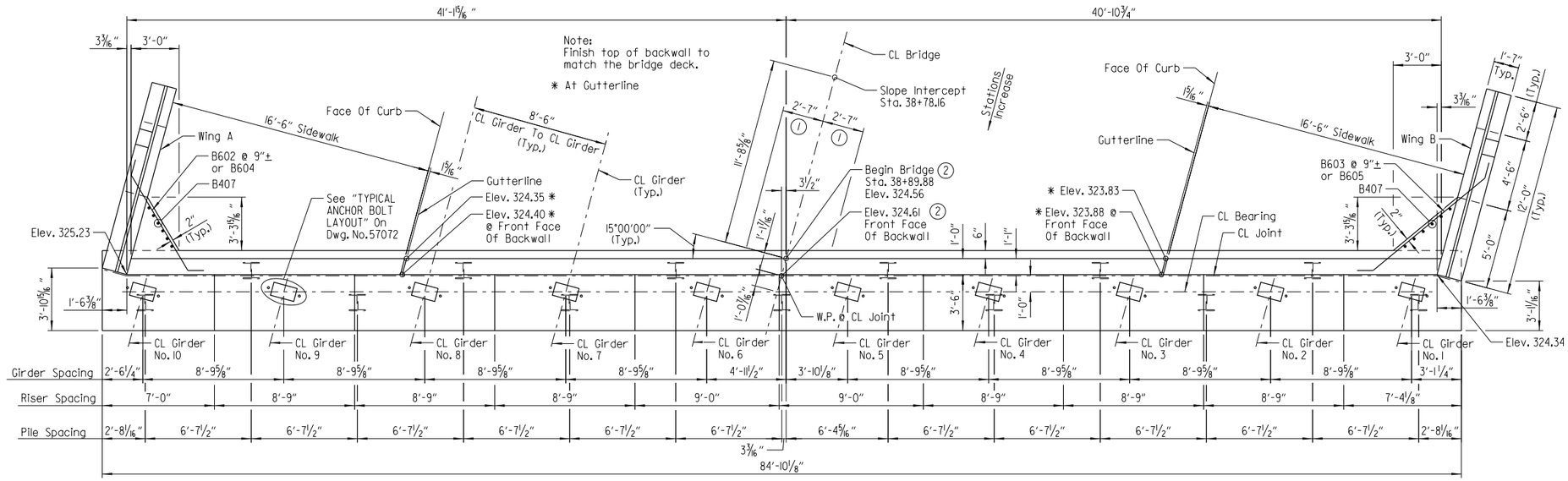
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: MAR. 2015 FILENAME: B080517_BL3.dgn
CHECKED BY: DRG DATE: MAR. 2015 SCALE: As Shown
DESIGNED BY: - DATE: -

BRIDGE NO. 07345 DRAWING NO. 57069

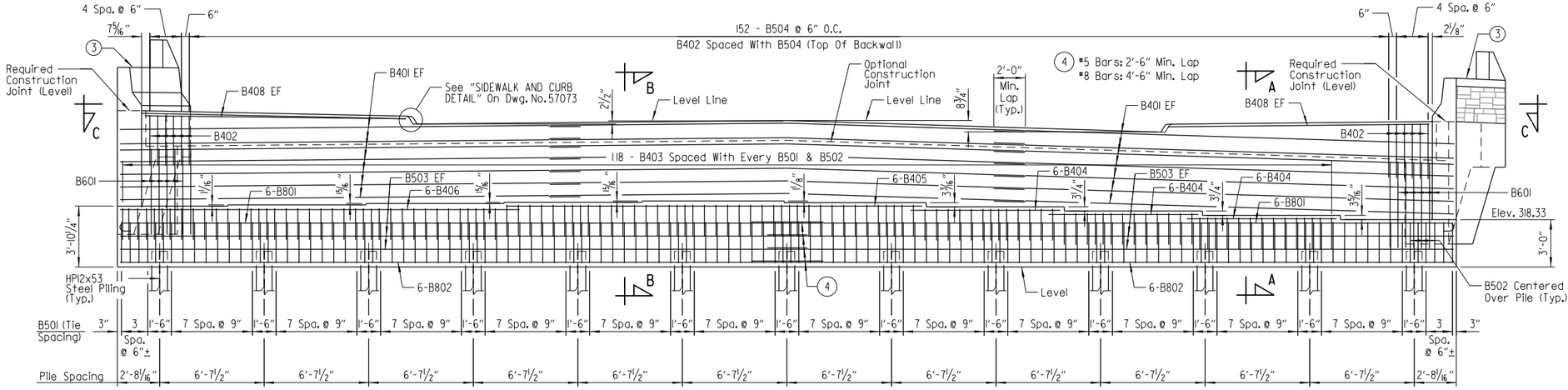
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED
6-1-15			

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080517	71	182
(1) 07345		END BENT DETAILS		57070



PLAN - END BENT NO. 1

Scale: 1/4" = 1'-0"



ELEVATION - END BENT NO. 1

(Looking Back)
Scale: 1/4" = 1'-0"

(1) See "ROUNDING DETAIL" on dwg. no. 57078

(2) Measured to Working Point - See "ROUNDING DETAIL" on dwg. no. 57078

(3) Metalrailing not shown for clarity. For details see dwg. no. 57086

GENERAL NOTES

End bent piling shall not be driven until the waiting period has elapsed. See LAYOUT for more information.

All concrete shall be Class "S" and be poured in the dry. All exposed corners to be chamfered 3/4" unless otherwise noted.

All reinforcing steel shall conform to AASHTO M31 or ~~M53~~ M322 Type A, Gr. 60 (Yield Strength = 60,000 psi). (1)

Structural steel in end bents shall be AASHTO M270, Gr. 50 and shall be paid for as "BRIDGE CONSTRUCTION." Structural Steel shall be cleaned and painted in accordance with Section 807. The color of the paint shall be Black and shall match Fed. Std. 595B, Color Chip No. 27038.

If anchor bolts are drilled into cap, top reinforcing bars shall be properly placed to avoid damage.

For additional information, see LAYOUT.

Class 1 Protective Surface Treatment shall be applied to the top of backwall. Class 3 Textured Coating shall be applied in accordance with SP "TEXTURED COATING FINISH".

(1) Replaced "M53" with "M322 Type A", DRG 6-1-15. Checked by JHR

LEGEND

EF = Each Face

NOTES:
For "BAR LIST" & "BAR BENDING DIAGRAMS", see Dwg. No.57072
For "SECTION A-A", "B-B", & "VIEW C-C", see Dwg. No. 57072
For details of wing & rail, see Dwg. No. 57073
For details of elastomeric bearing pads, see Dwg. No. 57089

Note:
The Backwall Above The Required Construction Joint Shall Not Be Poured Until The Girders Are In Place. Backwall May Be Placed Prior To Placing The Adjacent Concrete Deck Only If The Optional Backwall Construction Joint Is Used. See "DETAILS FOR BLOCKING EXPANSION JOINT DEVICE" On Dwg. No. 57087 For Additional Information.

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No. 8017
JOHN H. RUDDELL

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BRIDGE ENGINEER

SHEET 1 OF 4
DETAILS OF END BENT NO. 1
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: MAR. 2015 FILENAME: B080517_A1.dgn
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DESIGNED BY: SRY DATE: JAN. 2015
BRIDGE NO. 07345 DRAWING NO. 57070

DRGOAD 6/1/2015 12:39 PM
WORKSPACE: AHTD Bridge
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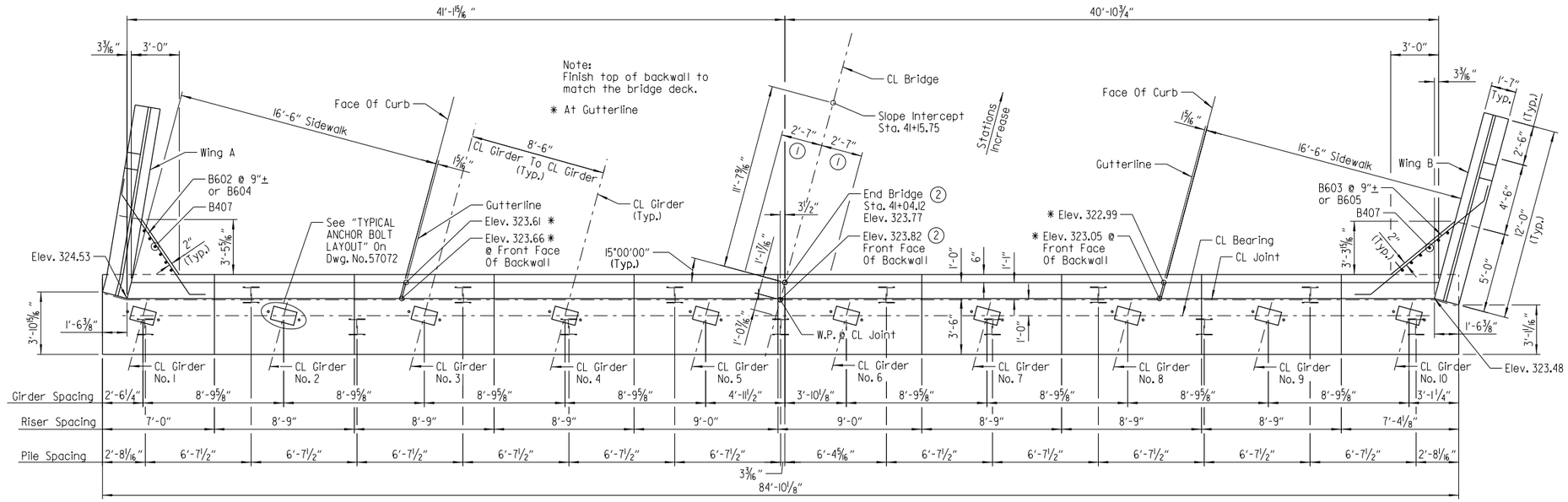
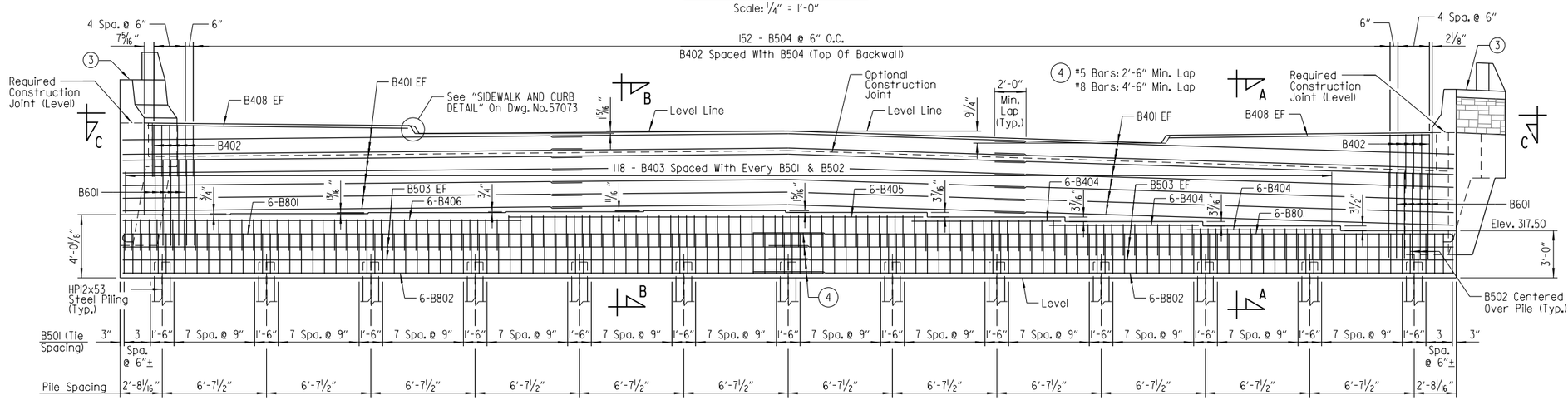
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080517	72	182
				(1) 07345		END BENT DETAILS		57071



PLAN - END BENT NO. 3

Scale: 1/4" = 1'-0"



ELEVATION - END BENT NO. 3

(Looking Forward)
Scale: 1/4" = 1'-0"

(1) See "ROUNDING DETAIL" on dwg. no. 57078

(2) Measured to Working Point - See "ROUNDING DETAIL" on dwg. no. 57078

(3) Metal railing not shown for clarity. For details see dwg. no. 57086

LEGEND

EF = Each Face

NOTES:
For "BAR LIST" & "BAR BENDING DIAGRAMS", see Dwg. No. 57072
For "SECTION A-A", "B-B", & "VIEW C-C", see Dwg. No. 57072
For "GENERAL NOTES", see Dwg. No. 57070
For details of wing & rail, see Dwg. No. 57073
For details of elastomeric bearing pads, see Dwg. No. 57089

Note:
The Backwall Above The Required Construction Joint Shall Not Be Poured Until The Girders Are In Place. Backwall May Be Placed Prior To Placing The Adjacent Concrete Deck Only If The Optional Backwall Construction Joint Is Used. See "DETAILS FOR BLOCKING EXPANSION JOINT DEVICE" On Dwg. No. 57087 For Additional Information.

STATE OF ARKANSAS
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BRIDGE ENGINEER

SHEET 2 OF 4
DETAILS OF END BENT NO. 3
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: MAR. 2015 FILENAME: B080517_A2.dgn
CHECKED BY: LIC DATE: APR. 2015 SCALE: As Shown
DESIGNED BY: SRY DATE: JAN. 2015
BRIDGE NO. 07345 DRAWING NO. 57071

DRGOAD 5/19/2015 7:27:35 PM
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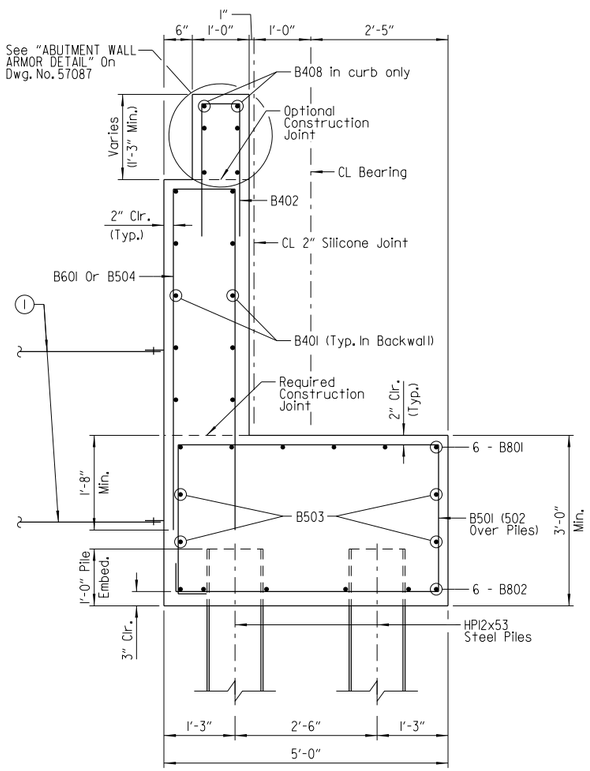
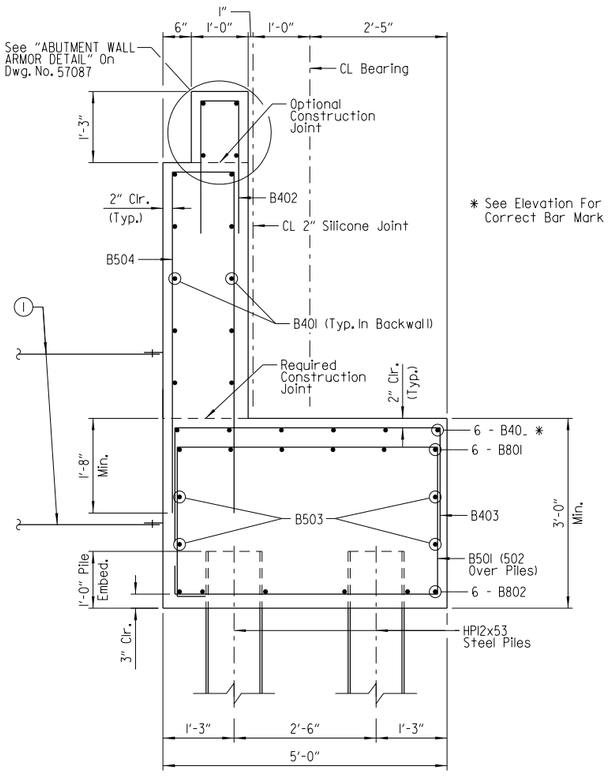
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080517	73	182
				(1) 07345		END BENT DETAILS		57072



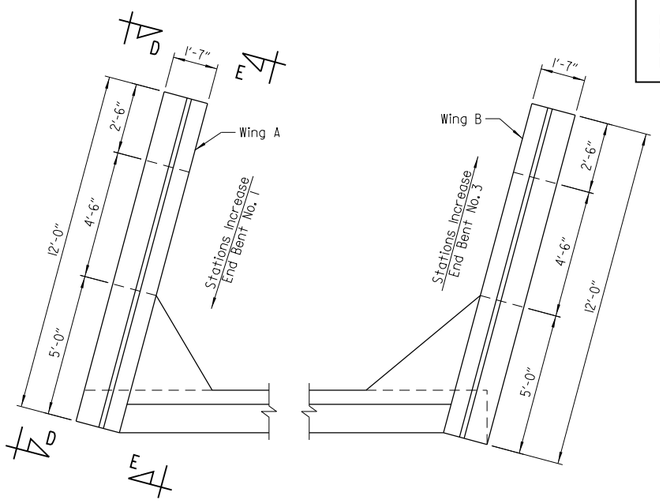
SECTION A-A
Scale: 3/4" = 1'-0"



* See Elevation For Correct Bar Mark

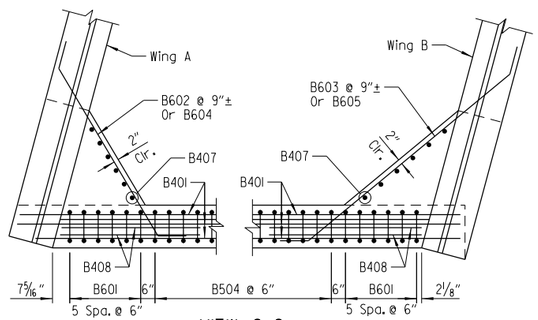
SECTION B-B
Scale: 3/4" = 1'-0"

Note:
The Backwall Above The Required Construction Joint Shall Not Be Poured Until The Girders Are In Place. Backwall May Be Placed Prior To Placing The Adjacent Concrete Deck Only If The Optional Backwall Construction Joint Is Used. See "DETAILS FOR BLOCKING EXPANSION JOINT DEVICE" On Dwg. No. 57087 For Additional Information.



PLAN OF WINGS
Scale: 3/8" = 1'-0"

Note:
See Dwg. No. 57073 For View D-D And Section E-E.



VIEW C-C
Scale: 3/8" = 1'-0"

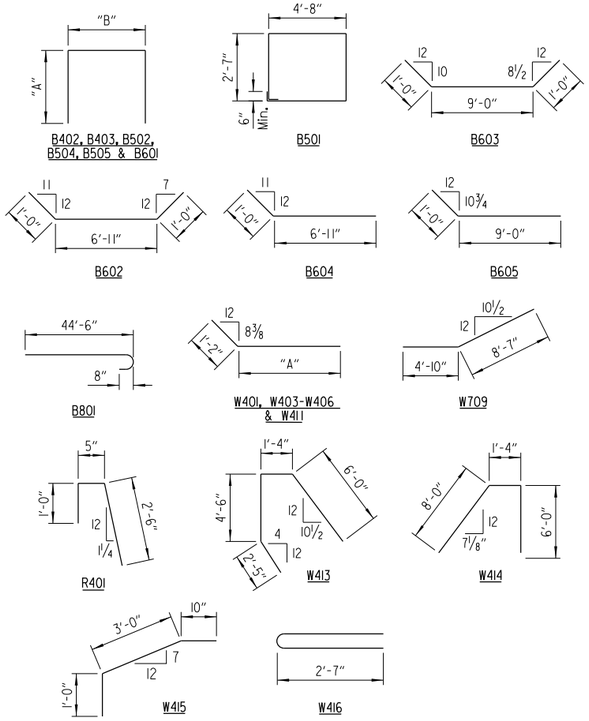
BAR LIST

MARK	NO. REQ'D	LENGTH	"A"	"B"	P.D.
B401	42	30'-0"			STR.
B402	162	7'-2"	3'-4"	8"	2"
B403	118	8'-6"	2'-0"	4'-8"	2"
B404	18	9'-9"			STR.
B405	6	26'-5"			STR.
B406	6	25'-4"			STR.
B407	12	5'-3"			STR.
B408	4	16'-5"			STR.
B501	104	15'-0"			2 1/2"
B502	26	9'-7 1/2"	2'-7"	4'-8"	2 1/2"
B503	8	43'-6"			STR.
B504	152	11'-11 1/2"	5'-6"	1'-2"	2 1/2"
B601	10	11'-10"	5'-6"	1'-2"	4 1/2"
B602	5	8'-11"			4 1/2"
B603	5	11'-0"			4 1/2"
B604	1	7'-11"			4 1/2"
B605	1	10'-0"			4 1/2"
B801	12	45'-5"			6"
B802	12	44'-6"			STR.
R401	28	3'-9"			2"
R402	12	11'-8"			STR.
W401	14	9'-1"	7'-11"		3"
W402	14	10'-2"			STR.
W403 To W406	2 Each	8'-2" To 4'-9"	7'-0" To 3'-7"		3"
W407 To W410	2 Each	9'-2" To 5'-9"			STR.
W411	6	4'-0"	2'-10"		3"
W412	6	5'-2"			STR.
W413	3	14'-2"			3"
W414	3	15'-3"			3"
W415	2	4'-10"			3"
W416	6	5'-4"			3"
W701	8	11'-8"			STR.
W702 To W708	4 Each	8'-10" To 5'-6"			STR.
W709	4	13'-5"			5 1/4"

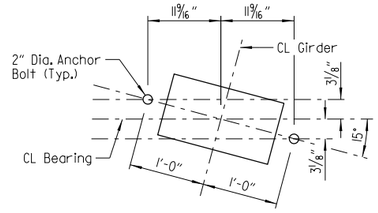
Note:
Number of bars shown is for one end bent only.

(1) Reinforcing Straps and attachments to be designed and furnished by MSE wall supplier. See Dwg. No. 57065 for additional details.

BAR BENDING DIAGRAMS



Note:
Dimensions of bars in bending diagrams are out-to-out.



TYPICAL ANCHOR BOLT LAYOUT
Scale: 1" = 1'-0"

STATE OF ARKANSAS
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SHEET 3 OF 4
DETAILS OF END BENTS
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: MAR. 2015 FILENAME: B080517_A3.dgn
CHECKED BY: LIC DATE: APR. 2015 SCALE: As Shown
DESIGNED BY: SRY DATE: JAN. 2015
BRIDGE NO. 07345 DRAWING NO. 57072

DRGOAD 5/19/2015 7:27:36 PM
WORKSPACE: AHTD Bridge
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REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080517	74	182
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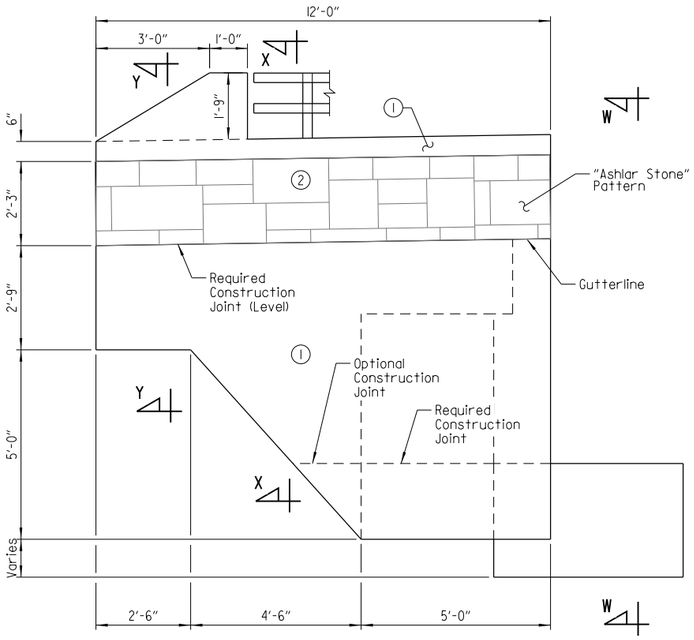
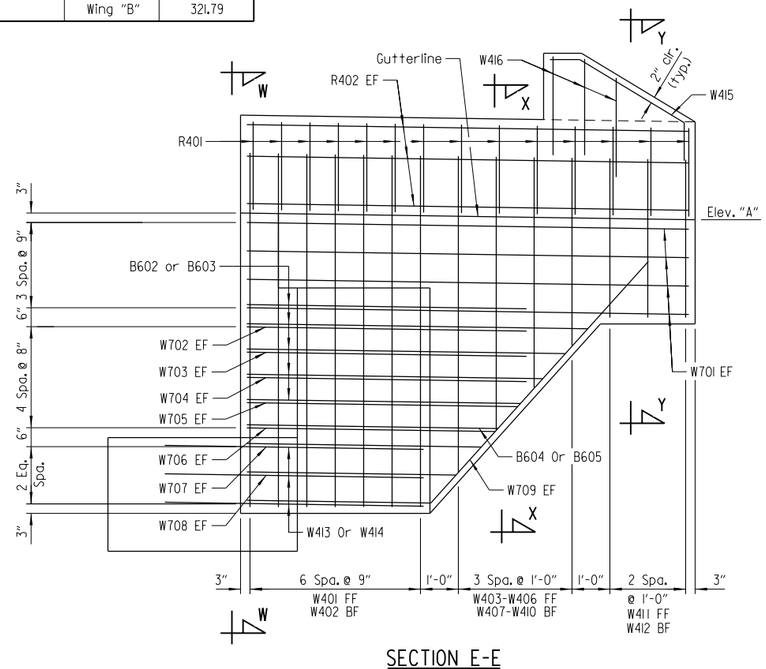
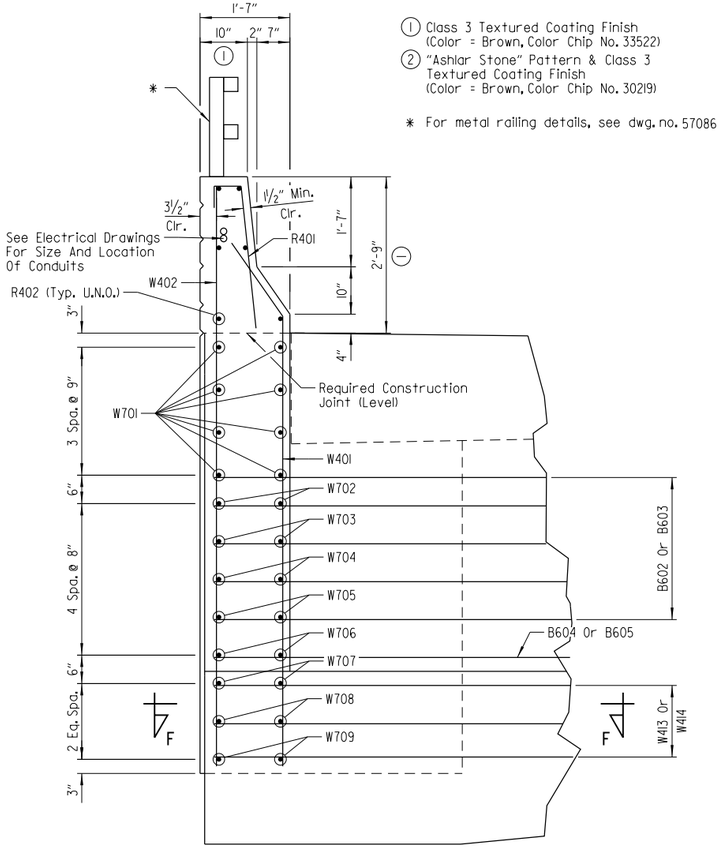


VIEW D-D
Scale: ½" = 1'-0"

TABLE OF ELEVATIONS		
End Bent No.	Location	Elev. "A"
1	Wing "A"	323.75
	Wing "B"	322.75
3	Wing "A"	322.94
	Wing "B"	321.79



SECTION E-E
Scale: ½" = 1'-0"

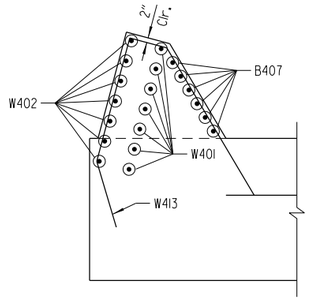


SECTION W-W
Scale: ¾" = 1'-0"

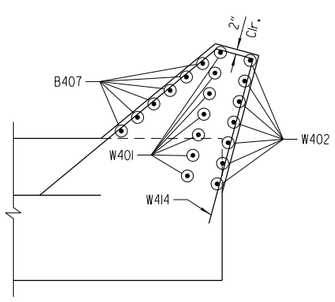
① Class 3 Textured Coating Finish (Color = Brown, Color Chip No. 33522)
② "Ashlar Stone" Pattern & Class 3 Textured Coating Finish (Color = Brown, Color Chip No. 30219)

* For metal railing details, see dwg. no. 57086

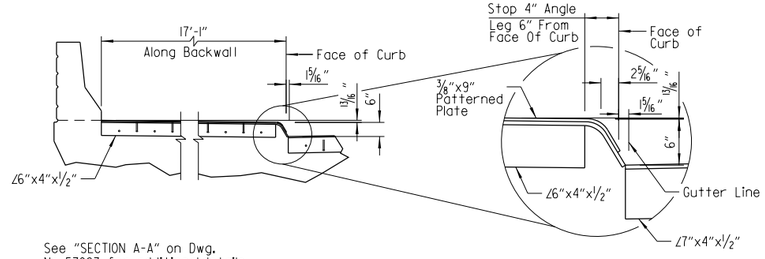
LEGEND
EF = Each Face
BF = Back Face
FF = Front Face
U.N.O. = Unless Noted Otherwise



SECTION F-F (WING A)
Scale: ⅜" = 1'-0"

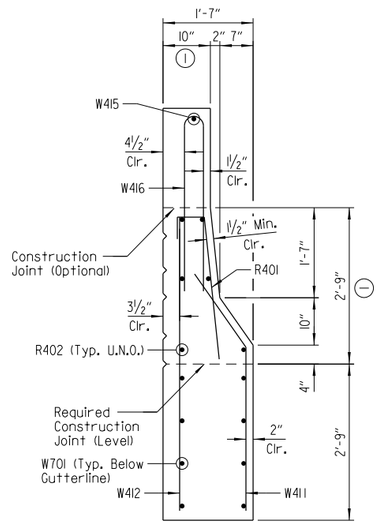


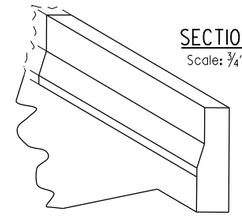
SECTION F-F (WING B)
Scale: ⅜" = 1'-0"



See "SECTION A-A" on Dwg. No. 57087 for additional details.

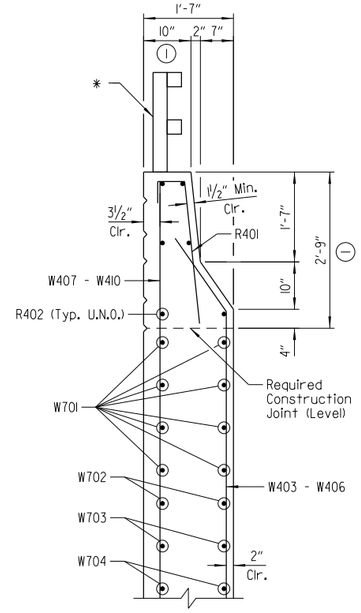
SIDEWALK AND CURB DETAIL
Scale: NTS





SECTION Y-Y
Scale: ¾" = 1'-0"

THREE DIMENSIONAL VIEW OF RAIL
Scale: N.T.S.



SECTION X-X
Scale: ¾" = 1'-0"

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 8017
JOHN H. RUDDELL

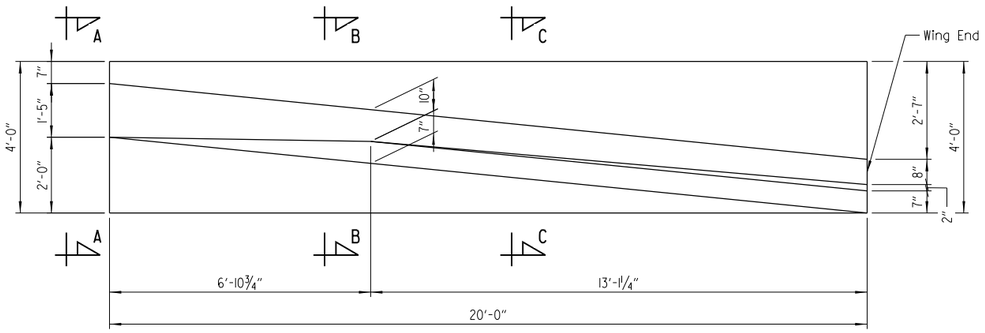
Digitally Signed 05/19/2015
BRIDGE ENGINEER

SHEET 4 OF 4
DETAILS OF END BENTS
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: MAR. 2015 FILENAME: B080517_A4.dgn
CHECKED BY: LIC DATE: APR. 2015 SCALE: As Shown
DESIGNED BY: SRY DATE: JAN. 2015
BRIDGE NO. 07345 DRAWING NO. 57073

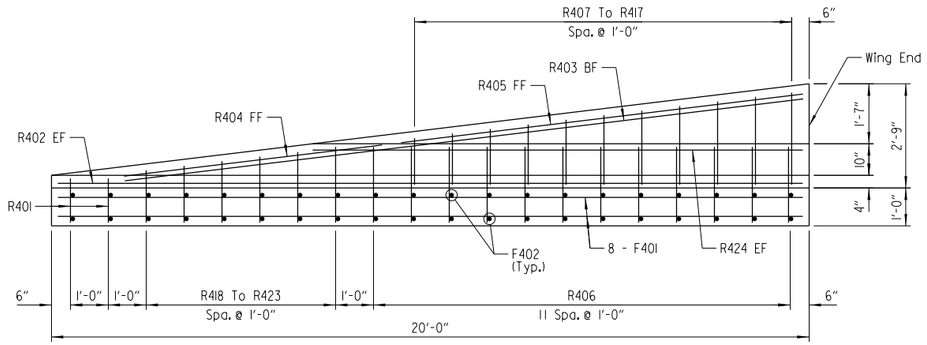
DRGOAD 5/19/2015 7:27:36 PM
WORKSPACE: AHTD Bridge
L:\20I2\I20I7590 - Conf\eIField Access\Drawings\6TH_ST\B080517_A4.dgn
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080517	75	182
				(1) 07345		TRANS. RAILING		57074

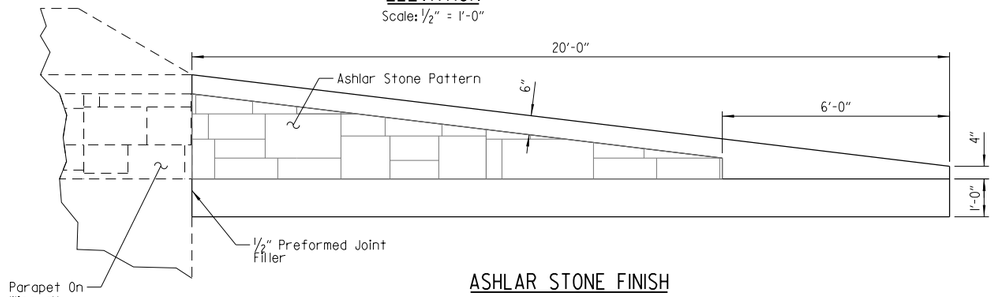


NOTE:
Railings on each side of roadway are opposite hand to each other.

PLAN
Scale: ½" = 1'-0"



ELEVATION
Scale: ½" = 1'-0"



ASHLAR STONE FINISH
(Looking At Back Face)
Scale: ½" = 1'-0"

NOTES:
Transitional Approach Railing shall be placed at ends of turnback wings at locations shown on the layout and at the end of the MSE Wall shown on the MSE Wall sheets.

All concrete shall be Class "S" and shall be poured in the dry. All exposed corners shall be chamfered ¾" unless otherwise noted.

All reinforcing steel shall conform to AASHTO M31 or M322 Type A, Grade 60. Reinforcing steel designated as galvanized shall be galvanized in accordance with ASTM A767. Use coating Class I with galvanization after fabrication.

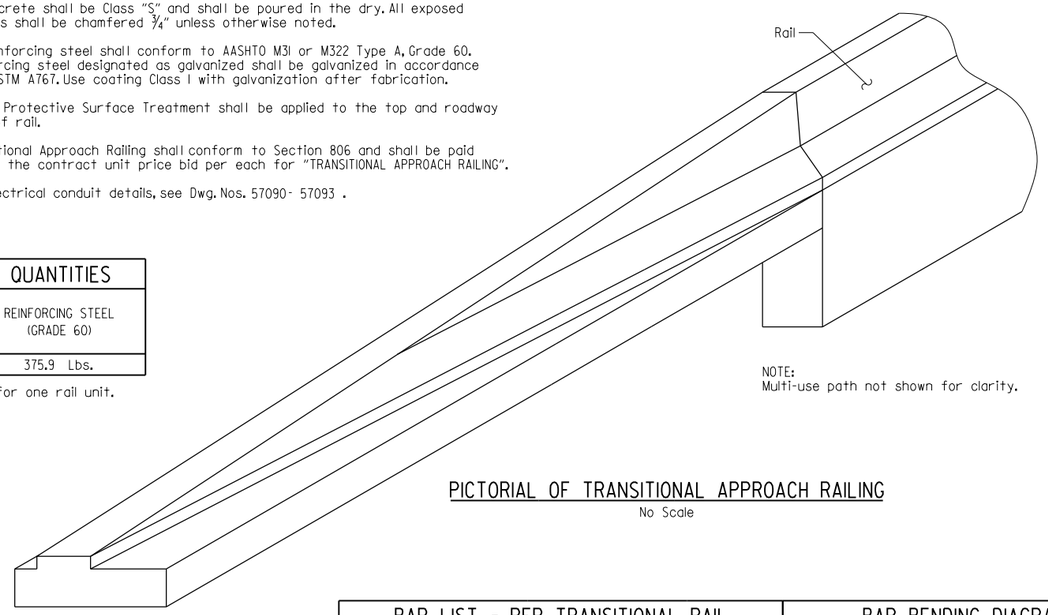
Class I Protective Surface Treatment shall be applied to the top and roadway face of rail.

Transitional Approach Railing shall conform to Section 806 and shall be paid for at the contract unit price bid per each for "TRANSITIONAL APPROACH RAILING".

For electrical conduit details, see Dwg. Nos. 57090- 57093 .

SCHEDULE OF QUANTITIES	
CLASS "S" CONCRETE	REINFORCING STEEL (GRADE 60)
4.20 C.Y.	375.9 Lbs.

Quantities shown are for one rail unit.



NOTE:
Multi-use path not shown for clarity.

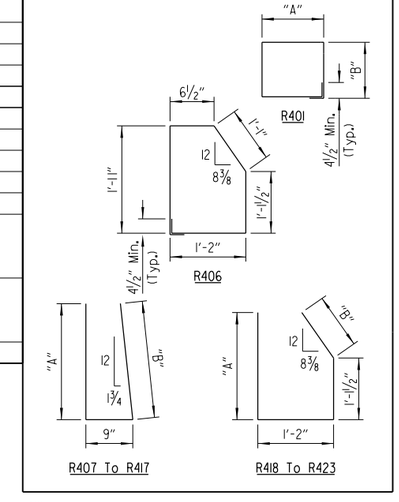
PICTORIAL OF TRANSITIONAL APPROACH RAILING
No Scale

LEGEND
FF = Front Face
BF = Back Face
EF = Each Face

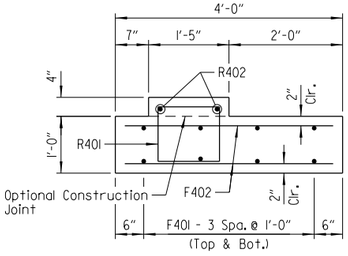
BAR LIST - PER TRANSITIONAL RAIL					
MARK	NO. REQ'D	LENGTH	"A"	"B"	P.D.
F401	8	19'-8"			Str.
F402	40	3'-8"			Str.
R401	2	4'-9"	1'-2"	1'-0½"	2"
R402	2	19'-9"			Str.
R403	1	18'-3"			Str.
R404	1	5'-0"			Str.
R405	1	12'-10"			Str.
R406	12	6'-2"			2"
R407 To R417	1 Ea.	3'-1" To 5'-5"	1'-3" To 2'-5"	1'-3" To 2'-5"	2"
R418 To R423	1 Ea.	3'-8½" To 5'-0"	1'-4" To 1'-11"	3" To 11½"	2"
R424	2	12'-10"			Str.

NOTE:
Number of bars shown is for one transitional approach rail only.

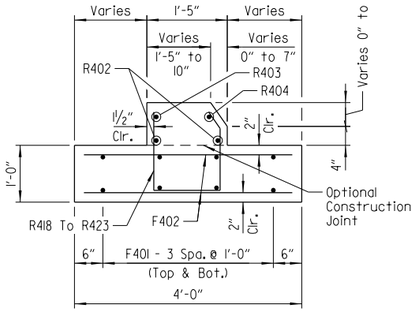
BAR BENDING DIAGRAMS



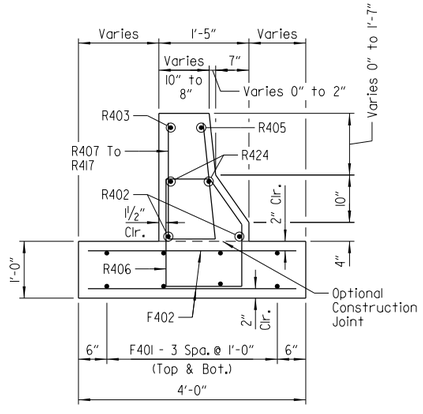
NOTE:
Dimensions of bars in bending diagrams are out-to-out.



VIEW A-A
Scale: ¾" = 1'-0"



SECTION B-B
Scale: ¾" = 1'-0"



SECTION C-C
Scale: ¾" = 1'-0"

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8017
JOHN H. RUDDELL

Digitally Signed 05/19/2015

BRIDGE ENGINEER

DETAILS OF TRANSITIONAL APPROACH RAILING

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

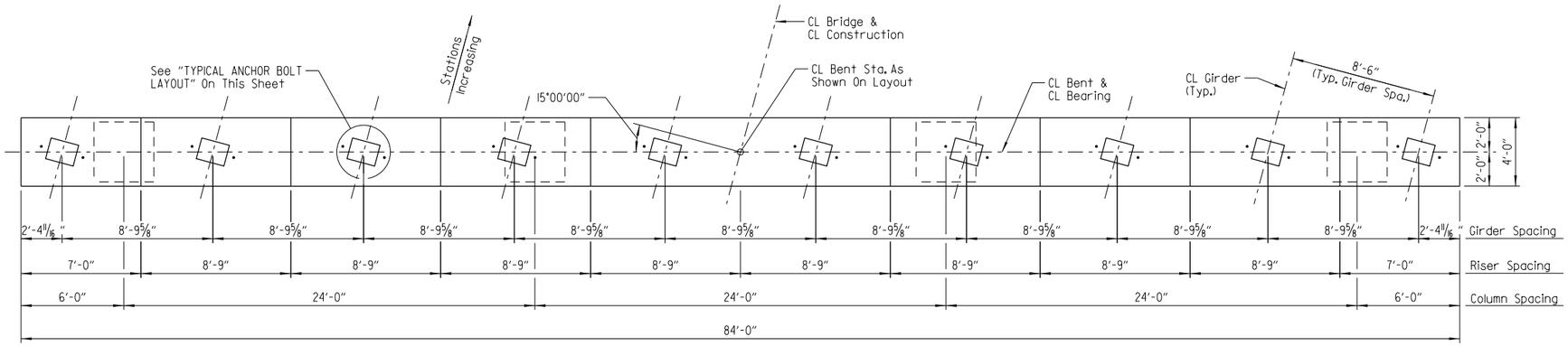
DRAWN BY: DRG DATE: MAR. 2015 FILENAME: B080517_TR.dgn
CHECKED BY: JHR DATE: MAY 2015 SCALE: As Shown
DESIGNED BY: DRG DATE: MAR. 2015

BRIDGE NO. 07345 DRAWING NO. 57074

DRGOAD 5/19/2015 7:27:37 PM
WORKSPACE: AHTD Bridge
L:\2012\20171590 - Contrell Field Access\Drawings\6TH_ST\B080517_TR.dgn
REVISED DATE:

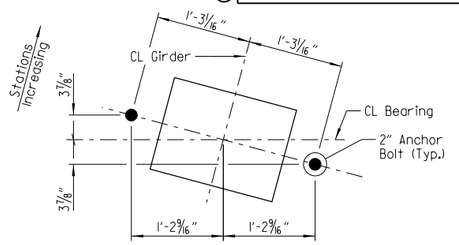
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080517	76	182
(1) 07345		INT. BENT DETAILS		57075



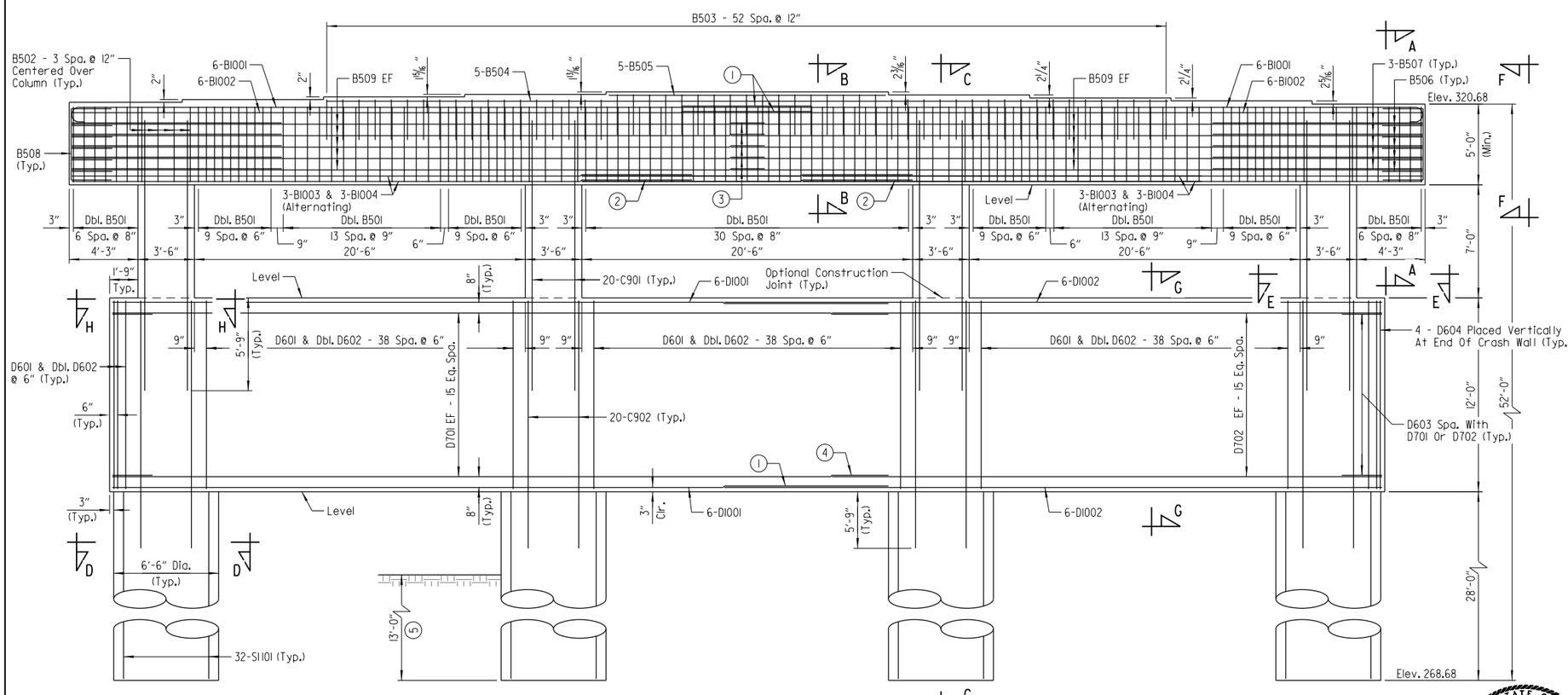
PLAN

Scale: 1/4" = 1'-0"



TYPICAL ANCHOR BOLT LAYOUT

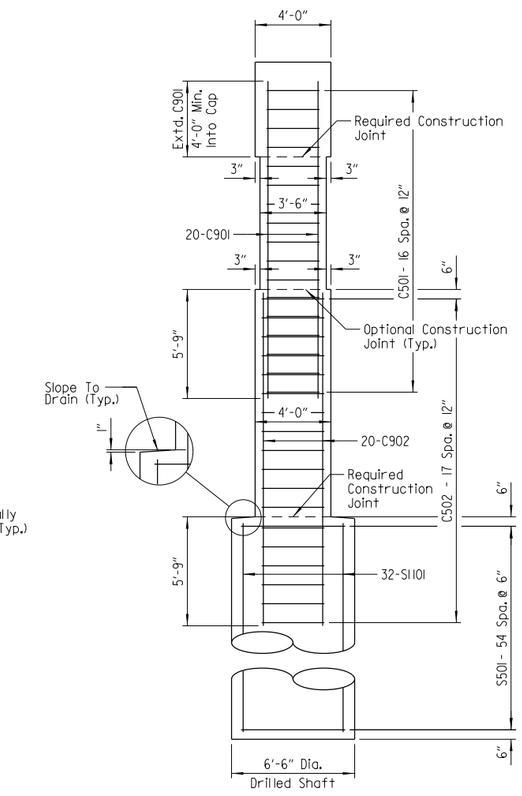
Scale: 1" = 1'-0"



ELEVATION

(Looking Forward)

Scale: 1/4" = 1'-0"



SECTION C-C

Scale: 1/4" = 1'-0"

(1) 10'-2" Min. Lap Splice

(2) 6'-0" Min. Lap Splice

(3) 2'-2" Min. Lap Splice

(4) 3'-6" Min. Lap Splice

(5) Minimum penetration into material designated as hard shale on boring legend.

LEGEND

EF = Each Face

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8017
JOHN H. RUDDELL

Digitally Signed 05/19/2015

BRIDGE ENGINEER

SHEET 1 OF 3
DETAILS OF INTERMEDIATE BENT NO. 2

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

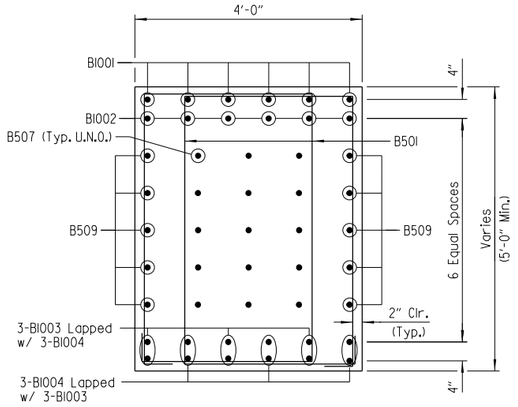
LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: FEB. 2015 FILENAME: B080517_B1.dgn
CHECKED BY: JHR DATE: MAR. 2015 SCALE: As Shown
DESIGNED BY: DRG DATE: JAN. 2015

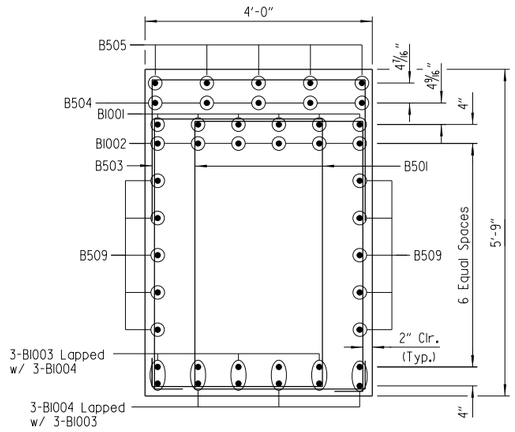
BRIDGE NO. 07345 DRAWING NO. 57075

DRGOAD 5/19/2015 7:27:37 PM
WORKSPACE: AHTD Bridge
L:\20I2\20I7590 - Contrell Field Access\Drawings\6TH_ST\B080517_B1.dgn
REVISED DATE:

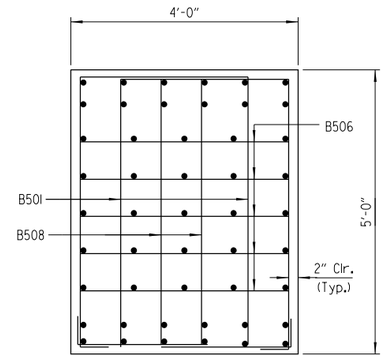
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
6-1-15				6	ARK.			
				JOB NO.		080517	77	182
				(1) 07345		INT. BENT DETAILS		57076



⚠1 SECTION A-A
Scale: 3/4" = 1'-0"

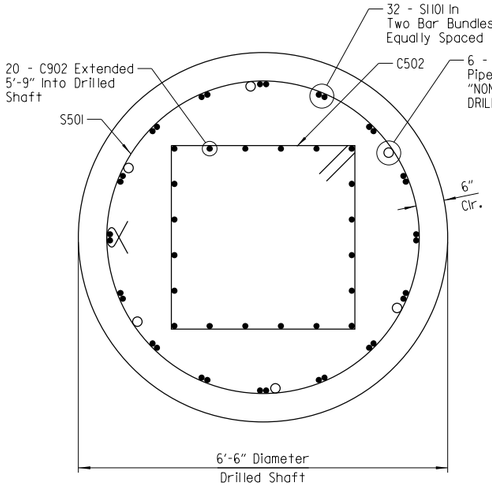


⚠1 SECTION B-B
Scale: 3/4" = 1'-0"

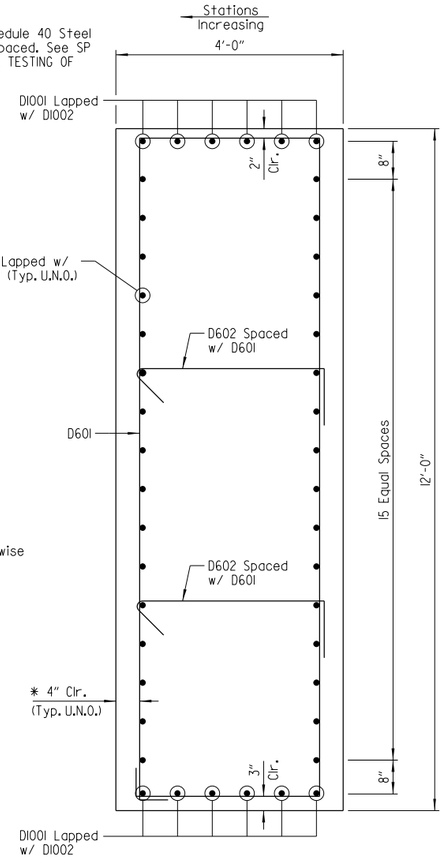


⚠1 VIEW F-F
Scale: 3/4" = 1'-0"

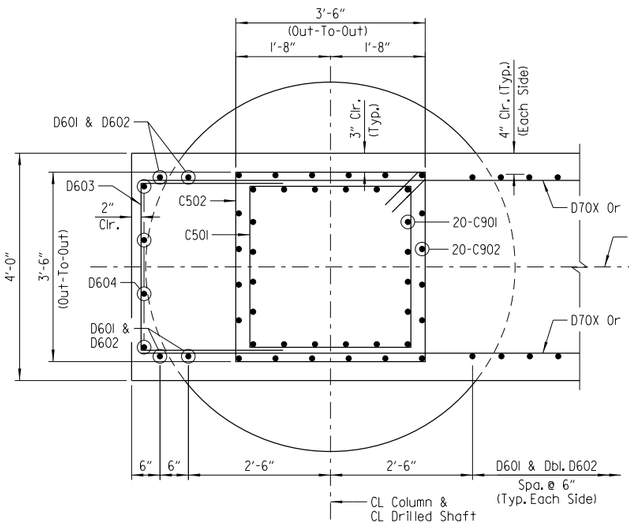
⚠1 Revised B501 bar length, DRG 6-1-15. Checked by JHR



SECTION D-D
Scale: 3/4" = 1'-0"

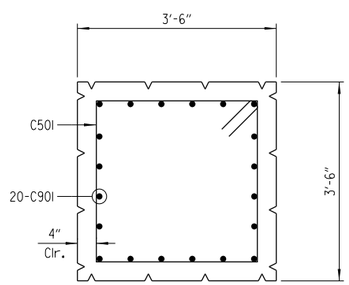


SECTION G-G
Scale: 3/4" = 1'-0"



SECTION H-H
Scale: 3/4" = 1'-0"

(1) Non-Pay Item - Subsidiary to SP "DRILLED SHAFT FOUNDATION".



SECTION E-E
Scale: 3/4" = 1'-0"

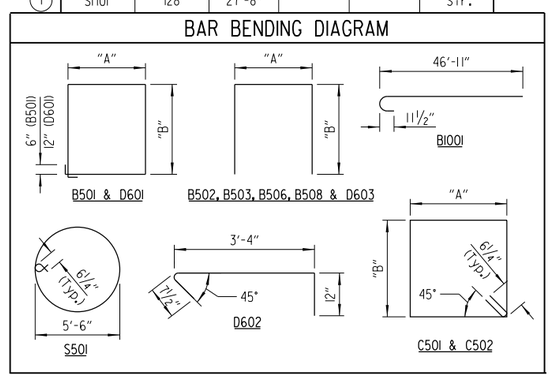
LEGEND
U.N.O. = Unless Noted Otherwise

* Maintain 4" clr. side cover to avoid conflict w/C902 bars. See "SECTION H-H" for details.

BAR LIST - PER BENT

	MARK	NO. REQ'D	LENGTH	"A"	"B"	P.D.
⚠1	B501	226	~~13'-1"~~ 15'-10"	~~1'-7½"~~ 3'-0"	4'-8"	2½"
	B502	16	12'-9"	3'-8"	4'-8"	2½"
	B503	53	8'-6"	3'-8"	2'-6"	2½"
	B504	5	52'-2"			Str.
	B505	5	17'-2"			Str.
	B506	10	8'-5"	3'-7"	2'-6"	2½"
	B507	30	13'-6"			Str.
	B508	4	9'-5"	4'-7"	2'-6"	2½"
	B509	20	42'-11"			Str.
	B1001	12	48'-4"			10"
	B1002	12	46'-9"			Str.
	B1003	12	52'-1"			Str.
	B1004	12	37'-7"			Str.
	C501	68	12'-0"	2'-10"	2'-10"	3¾"
	C502	72	14'-8"	3'-6"	3'-6"	3¾"
	C901	80	16'-9"			Str.
	C902	80	17'-7"			Str.
	D601	121	31'-0"	3'-4"	11'-7"	4½"
	D602	242	4'-8"			4½"
	D603	32	7'-10"	3'-2"	2'-6"	4½"
	D604	8	11'-7"			Str.
	D701	32	48'-1"			Str.
	D702	32	34'-1"			Str.
	D1001	12	48'-1"			Str.
	D1002	12	40'-9"			Str.
(1)	S501	220	18'-8"			3¾"
(1)	S1101	128	27'-8"			Str.

BAR BENDING DIAGRAM



NOTE: Dimensions of bars are out-to-out.

GENERAL NOTES

All concrete shall be Class "S" with a minimum 28-day compressive strength f'c = 3500 psi. Concrete shall be poured in the dry and all exposed corners shall be chamfered ¾" unless otherwise noted.

All reinforcing steel shall conform to AASHTO M31 or M322 Type A, Grade 60 (Yield Strength = 60,000 psi) except as noted otherwise.

Reinforcing bars in top of cap shall be properly placed to avoid interference with anchor bolts or sheet metal sleeves.

Concrete and reinforcing steel in drilled shafts will not be paid for directly but will be included in the unit price of "DRILLED SHAFT (78" Dia.)".

For construction methods, materials, measurement and payment of drilled shafts, see SP "DRILLED SHAFT FOUNDATIONS".

For additional information, see Layout.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8017
JOHN H. RUDDELL

Digitally Signed 06/01/2015

BRIDGE ENGINEER

SHEET 2 OF 3
DETAILS OF INTERMEDIATE BENT NO. 2

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

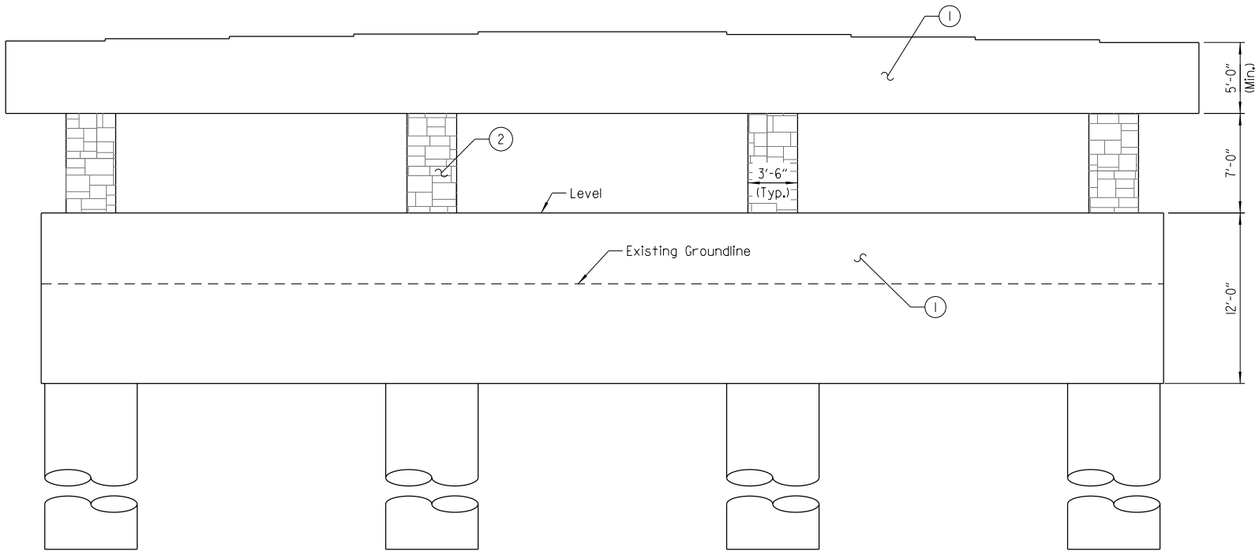
LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: FEB. 2015 FILENAME: B080517_B2.dgn
CHECKED BY: JHR DATE: MAR. 2015 SCALE: As Shown
DESIGNED BY: DRG DATE: JAN. 2015
BRIDGE NO. 07345 DRAWING NO. 57076

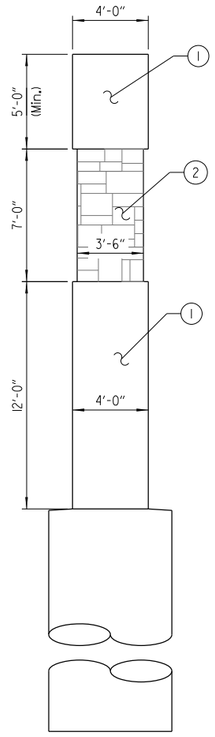
DRGOAD 6/1/2015 12:39 PM
WORKSPACE: AHTD Bridge
L:\202\2017590 - Conrell Field Access\Drawings\6TH_ST\B080517_B2.dgn
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

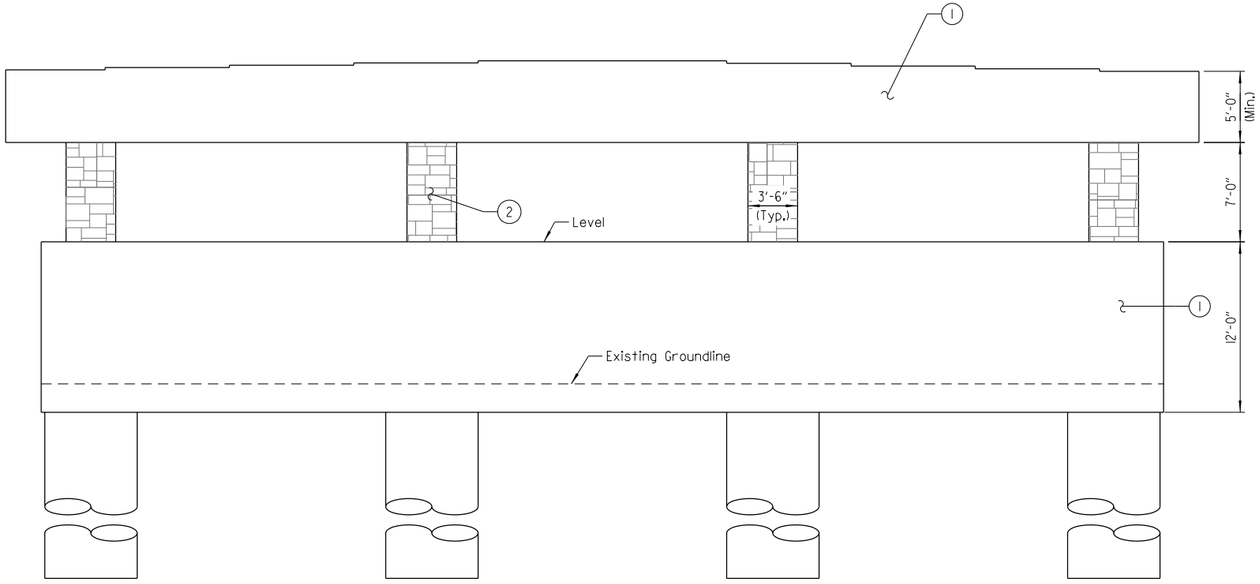
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080517	78	182
(1) 07345		INT. BENT DETAILS		57077



ELEVATION
(Looking Forward)
Scale: 3/16" = 1'-0"



ELEVATION
(Side View)
Scale: 1/4" = 1'-0"



ELEVATION
(Looking Back)
Scale: 3/16" = 1'-0"

(1) Class 3 Textured Coating Finish
(Color = Brown, Color Chip No. 33522)

(2) "Ashlar Stone" Pattern &
Class 3 Textured Coating Finish
(Color = Brown, Color Chip No. 30219)

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8017
JOHN H. RUDDELL

Digitally Signed 05/19/2015

BRIDGE ENGINEER

SHEET 3 OF 3
DETAILS OF INTERMEDIATE
BENT NO. 2

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: DRG DATE: MAR. 2015 FILENAME: B080517_B3.dgn
CHECKED BY: JHR DATE: MAR. 2015 SCALE: As Shown
DESIGNED BY: DRG DATE: JAN. 2015

BRIDGE NO. 07345 DRAWING NO. 57077

DRGOAD 5/19/2015 12:17:46 PM
WORKSPACE: AHTD Bridge
L:\202\2017590 - Contrail Field Access\Drawings\6TH_ST\B080517_B3.dgn
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080517	79	182
(1) 07345		PL GIRDER UNIT		57078

(1) Measured to Working Point, see "ROUNDING DETAIL"

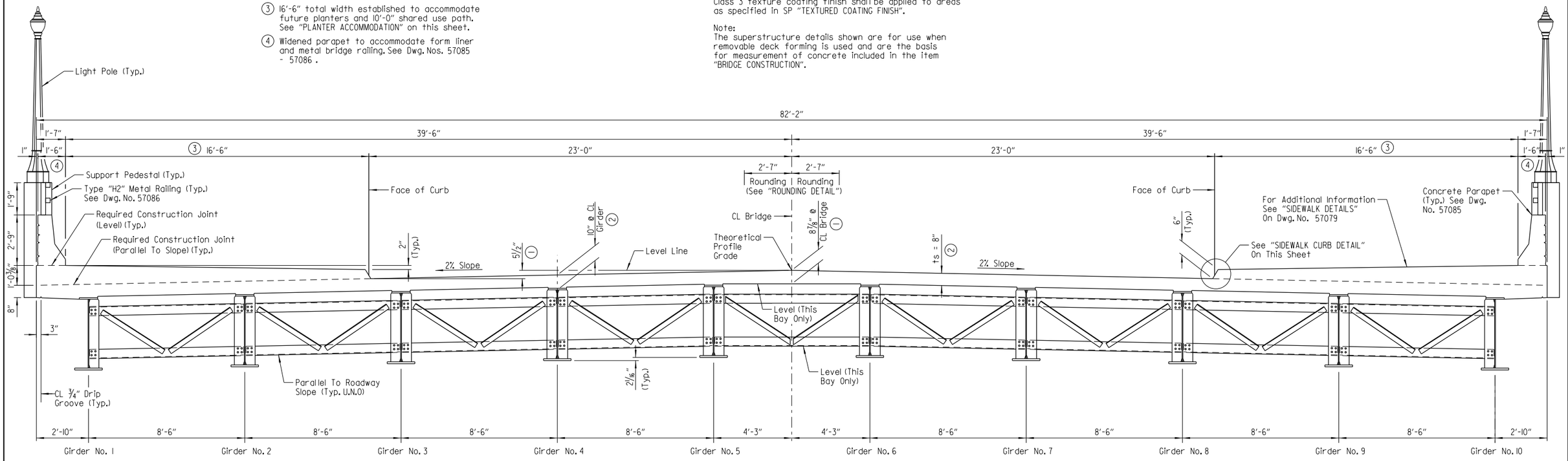
(2) See "ADJUSTMENT FOR SLAB THICKNESS TOLERANCE WHEN REMOVABLE DECK FORMING IS USED".

(3) 16'-6" total width established to accommodate future planters and 10'-0" shared use path. See "PLANTER ACCOMMODATION" on this sheet.

(4) Widened parapet to accommodate form liner and metal bridge railing. See Dwg. Nos. 57085 - 57086 .

Note:
Class 1 Protective Surface Treatment shall be applied to the roadway surface and sidewalk surface. Class 3 texture coating finish shall be applied to areas as specified in SP "TEXTURED COATING FINISH".

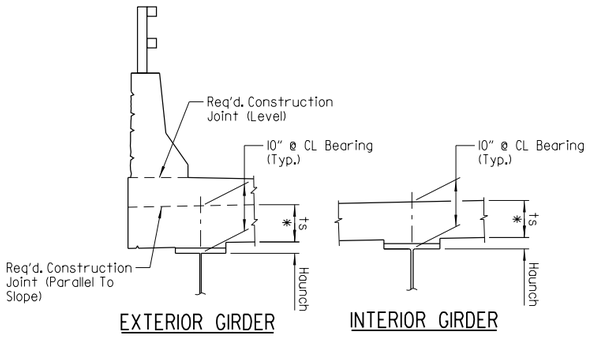
Note:
The superstructure details shown are for use when removable deck forming is used and are the basis for measurement of concrete included in the item "BRIDGE CONSTRUCTION".



TYPICAL SECTION

(Showing Overall Dimensions)
Scale: ⅜" = 1'-0"

Note:
For slab reinforcing details, see Dwg. No. 57079 .



EXTERIOR GIRDER

INTERIOR GIRDER

Note: t_S = Slab Thickness as shown on "TYPICAL SECTION".

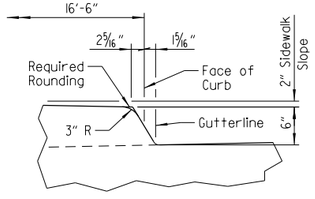
* Tolerance when removable deck forming is used is + ½", - ¼". Haunch forming is required and shall be adjusted to maintain slab thickness tolerance.

ADJUSTMENT FOR SLAB THICKNESS TOLERANCE WHEN REMOVABLE DECK FORMING IS USED

Scale: NTS

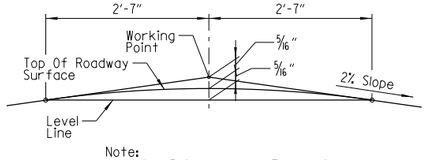
Haunch dimension may vary within the following limits to maintain the grade and slab thickness tolerance: minimum - occurs when the top flange contacts the bottom reinforcing steel; maximum - top flange thickness plus 1¼". No increase in concrete and structural steel quantities will be made to maintain tolerances.

Tolerances shown are applicable only when removable deck forming is used. See Std. Dwg. No. 55005 for tolerances when permanent steel deck forms are used. Payment for concrete shall be based on removable deck forming.



SIDEWALK CURB DETAIL

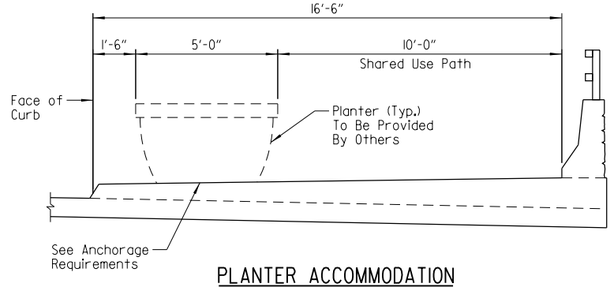
Scale: NTS



Note:
Working Point matches Theoretical Profile Grade.

ROUNDING DETAIL

Scale: NTS



PLANTER ACCOMMODATION

Scale: ⅜" = 1'-0"

The bridge has been designed to accommodate the loading associated with a 5' diameter 4' tall planter spaced at 25'-0" along the length of the bridge.

Anchorage Requirements:
If the empty weight of the planter is less than 250 pounds, the planter shall be connected to the deck to the satisfaction of the Engineer.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8017
JOHN H. RUDDELL

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BRIDGE ENGINEER

SHEET 1 OF 11
DETAILS OF 212'-0" CONTINUOUS COMPOSITE PLATE GIRDER UNIT

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

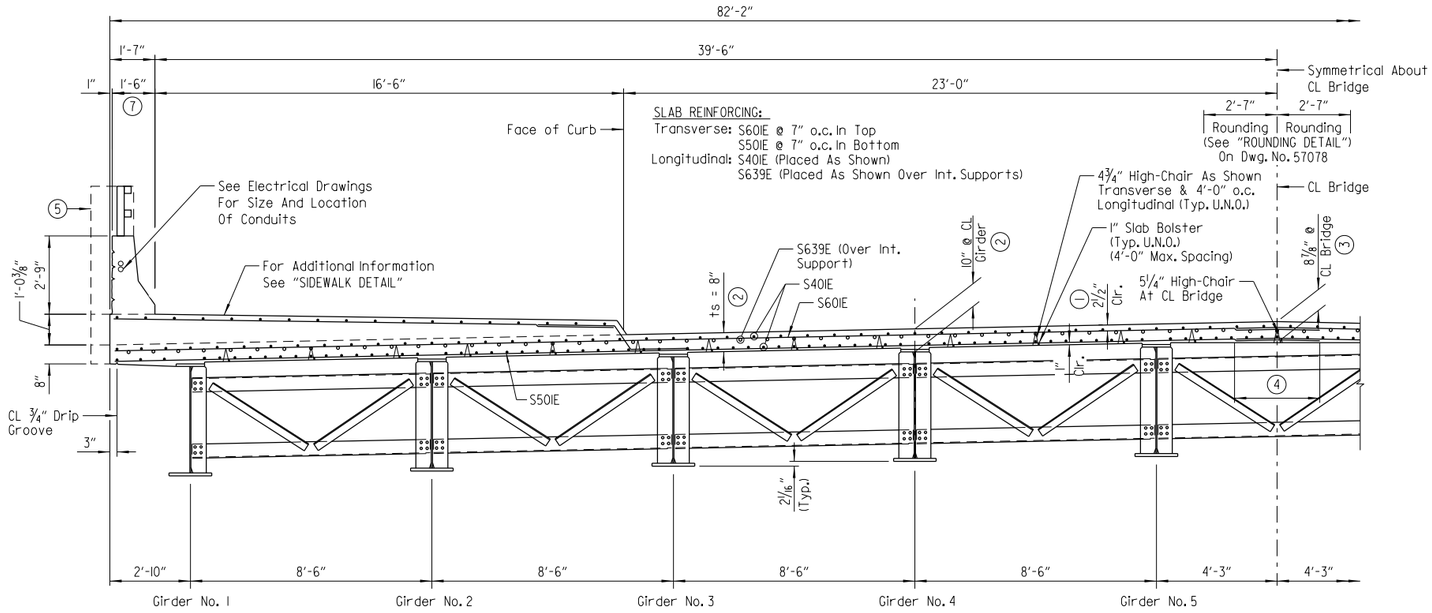
LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: FEB. 2015 FILENAME: B080517_SI.dgn
CHECKED BY: DRG DATE: MAR. 2015 SCALE: As Shown
DESIGNED BY: JHR DATE: FEB. 2015

BRIDGE NO. 07345 DRAWING NO. 57078

DRGOAD 5/19/2015 7:27:46 PM
WORKSPACE: AHTD Bridge
L:\202\2017590 - Cantrell Field Access\Drawings\6TH_ST\B080517_SI.dgn
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080517	80	182
				(1) 07345		PL GIRDER UNIT		57079



HALF SECTION - SHOWING DECK REINFORCING

(Looking Ahead)
Scale: ⅜" = 1'-0"

LEGEND

U.N.O. = Unless Noted Otherwise

(1) TOLERANCE:
Minus = ¼"
Plus = Amount of slab thickening used to meet slab thickness tolerance - See "ADJUSTMENT FOR SLAB THICKNESS TOLERANCE WHEN REMOVABLE DECK FORMING IS USED" on Dwg. No. 57078

(2) See "ADJUSTMENT FOR SLAB THICKNESS TOLERANCE WHEN REMOVABLE DECK FORMING IS USED" on Dwg. No. 57078.

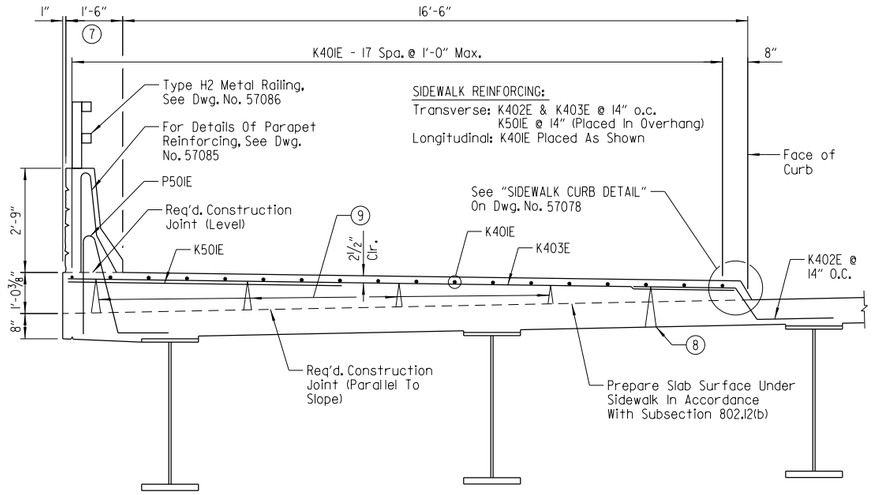
(3) Measured to Working Point, see "ROUNDING DETAIL" on Dwg. No. 57078.

(4) 3'-3" min. lap - #5
3'-10" min. lap - #6

(5) Support pedestal, see details on Dwg. No. 57085.

(6) Trim vertical leg of split channel as required.

(7) Widened parapet to accommodate form liner and metal bridge railing. See Dwg. Nos. 57085 - 57086.

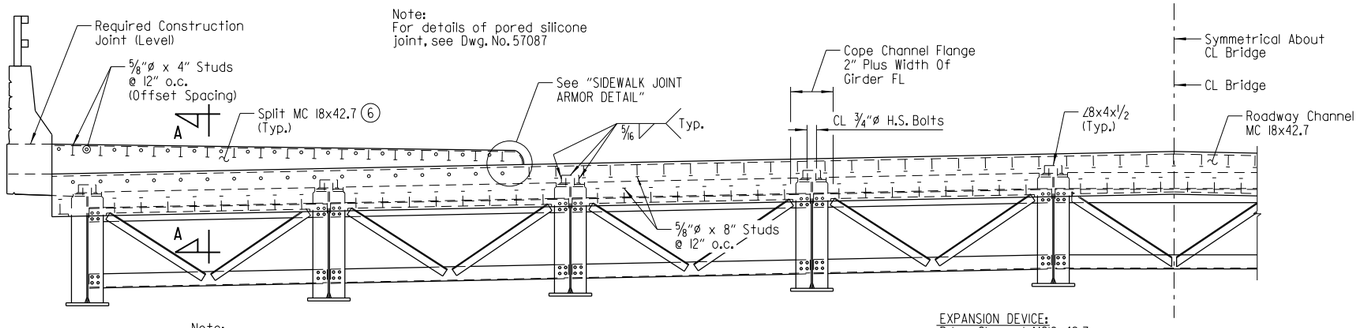


(8) 11½" Highchair @ 4'-0" o.c. long.

(9) Unless noted otherwise height of hi-chairs in sidewalk areas shall be set as necessary to maintain 2½" clear cover to top transverse bars. Space as shown transverse (4'-0" max.) and 4'-0" o.c. long.

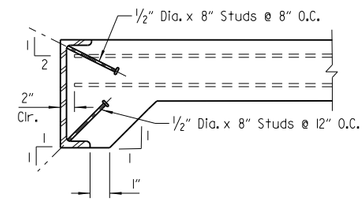
SIDEWALK DETAIL

Scale: ½" = 1'-0"



TYPICAL SECTION THRU JOINT

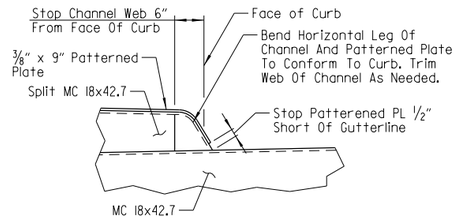
(Looking Ahead)
Scale: NTS



DETAIL OF ALTERNATE ANCHORS

Scale: NTS

Note:
As an alternate to ⅝"ø studs, ½"ø x 8" studs spaced as shown may be used. Use weight of ⅝"ø stud as basis of measurement of structural steel in anchors



SIDEWALK JOINT ARMOR DETAIL

Scale: NTS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 8017
JOHN H. RUDDELL

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BRIDGE ENGINEER

SHEET 2 OF 11
DETAILS OF 212'-0" CONTINUOUS COMPOSITE PLATE GIRDER UNIT

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

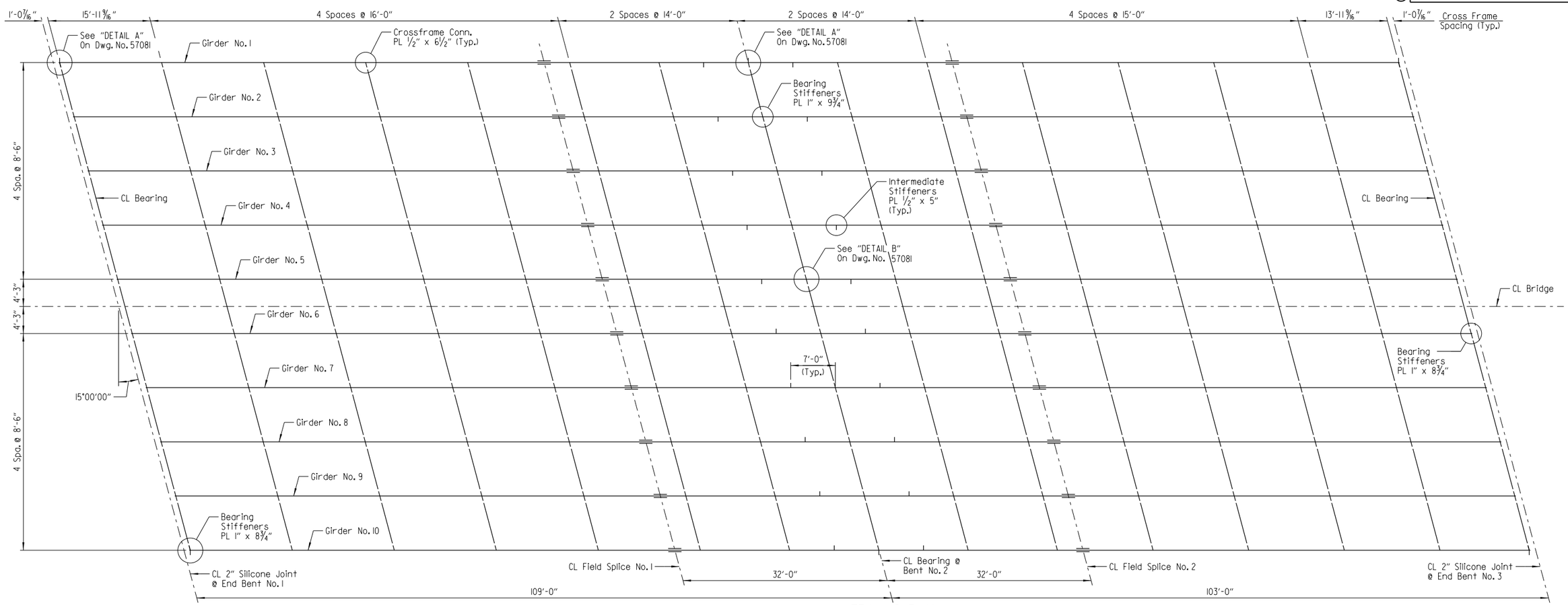
DRAWN BY: HEW DATE: FEB. 2015 FILENAME: B080517_S2.dgn
CHECKED BY: DRG DATE: MAR. 2015 SCALE: As Shown
DESIGNED BY: JHR DATE: FEB. 2015

BRIDGE NO. 07345 DRAWING NO. 57079

DRGOAD 5/19/2015 7:27:47 PM
WORKSPACE: AHTD Bridge
L:\202\2017590 - Confrell Field Access\Drawings\6TH_ST\B080517_S2.dgn
REVISED DATE:

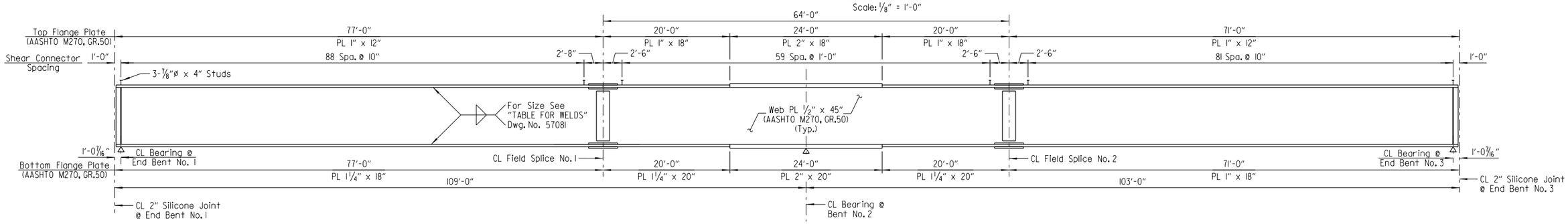
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080517	81	182
(1) 07345		PL GIRDER UNIT		57080



FRAMING PLAN

Scale: 1/8" = 1'-0"



TYPICAL GIRDER ELEVATION

Scale: NTS

Note:
All crossframe connection plates and bearing stiffeners shall be placed along the skew except as shown for bearing stiffeners on outside face of exterior girder.

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BRIDGE ENGINEER

SHEET 3 OF 11
DETAILS OF 212'-0" CONTINUOUS COMPOSITE PLATE GIRDER UNIT

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: FEB. 2015 FILENAME: B080517_S3.dgn
CHECKED BY: DRG DATE: MAR. 2015 SCALE: As Shown
DESIGNED BY: JHR DATE: FEB. 2015

BRIDGE NO. 07345 DRAWING NO. 57080

DRGOAD 5/19/2015 7:27:47 PM
WORKSPACE: AHTD Bridge
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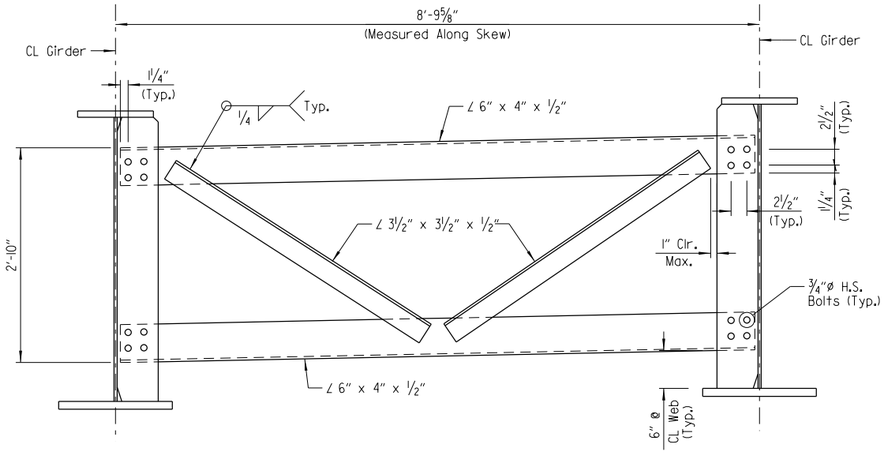
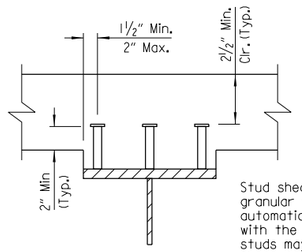
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080517	82	182
				(1) 07345		PL GIRDER UNIT		57081



TYPICAL CROSS-FRAME DETAIL

Scale: 1" = 1'-0"



Stud shear connectors shown shall be ⅞"ø x 4" long, granular flux filled, solid fluxed or equal, and automatically end welded to the flange in accordance with the recommendations of the manufacturer. ¾"ø studs may be used in place of the ⅞"ø studs shown, at the ratio of 1.361 - ¾"ø studs in place of one ⅞"ø stud. ⅞"ø studs willbe used as basis for measurement of structural steel in shear connectors.

SHEAR CONNECTOR DETAIL

Scale: NTS

Notes:

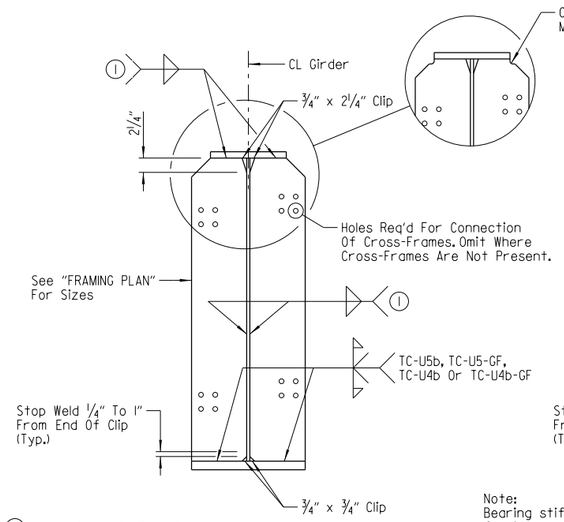
1. For "GENERAL NOTES", see Drawing No. 57088
2. All structural steel including girders, cross-frames, bearing stiffeners, web stiffeners and connection plates, shall be AASHTO M270, Grade 50.
3. For elastomeric bearing details, see Drawing No. 57089
4. For details of field splices, see Drawing No. 57082
5. For typical haunch details, see Drawing No. 57078
6. For alternate anchor details, see Drawing No. 57079
7. For "TABLE OF DEAD LOAD DEFLECTIONS", see Drawing No. 57082

TABLE FOR WELDS		
Material Thickness Of Thicker Part Joined (Inches)	Minimum Size Of Fillet Weld (Inches)	Single Pass Weld Must Be Used
To ¾" Inclusive	¼"	
Over ¾"	⅝"	

Notes: When a fillet weld size, as shown on the plans, is larger than the minimum, the first pass shall be that specified for minimum size of fillet weld.

CROSS-FRAME CONNECTION & INTERMEDIATE STIFFENER PLATE DETAIL

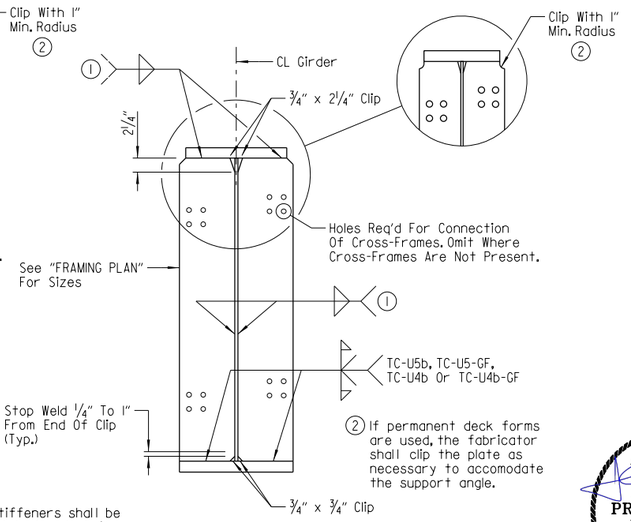
Scale: 1" = 1'-0"



① See "TABLE FOR WELDS" on this sheet for min. weld size

BEARING STIFFENER @ END BENTS

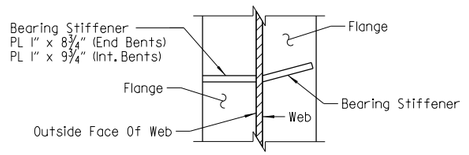
Scale: 1" = 1'-0"



Note:
Bearing stiffeners shall be fabricated to be plumb in their final positions.

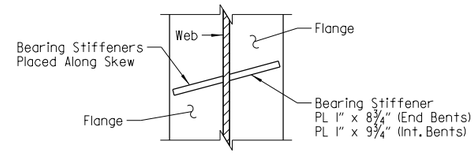
BEARING STIFFENER @ INTERIOR BENT

Scale: 1" = 1'-0"



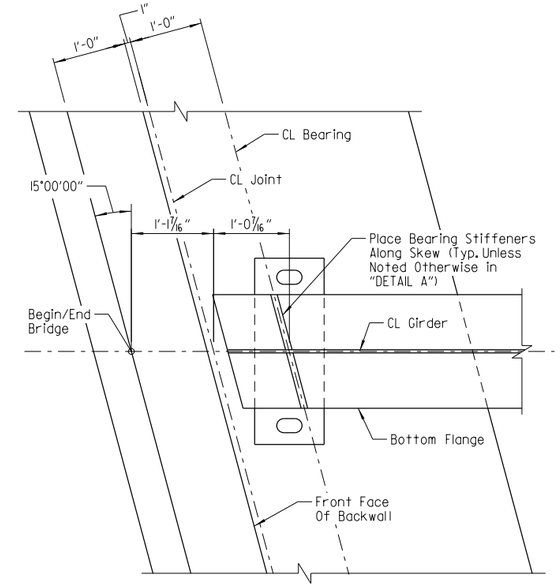
DETAIL A

Girders 1 & 10
Scale: NTS



DETAIL B

Girders 2-9
Scale: NTS



BEARING PLAN @ END BENT

Scale: 1" = 1'-0"

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BRIDGE ENGINEER

SHEET 4 OF 11
DETAILS OF 212'-0" CONTINUOUS COMPOSITE PLATE GIRDER UNIT

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: FEB. 2015 FILENAME: B080517_S4.dgn
CHECKED BY: DRG DATE: MAR. 2015 SCALE: As Shown
DESIGNED BY: JHR DATE: FEB. 2015

BRIDGE NO. 07345 DRAWING NO. 57081

DRGOAD 5/19/2015 7:27:48 PM
WORKSPACE: AHTD Bridge
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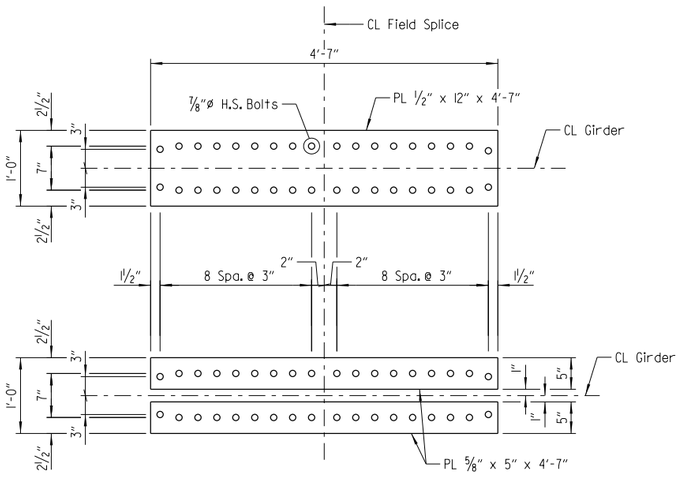
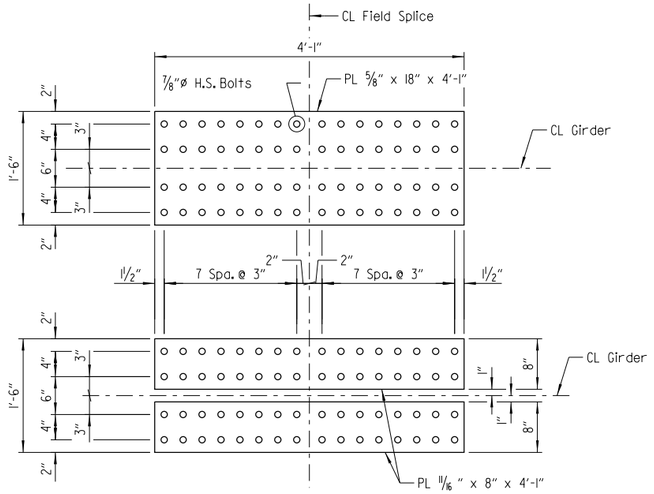
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080517	83	182
				(1) 07345		PL GIRDER UNIT		57082



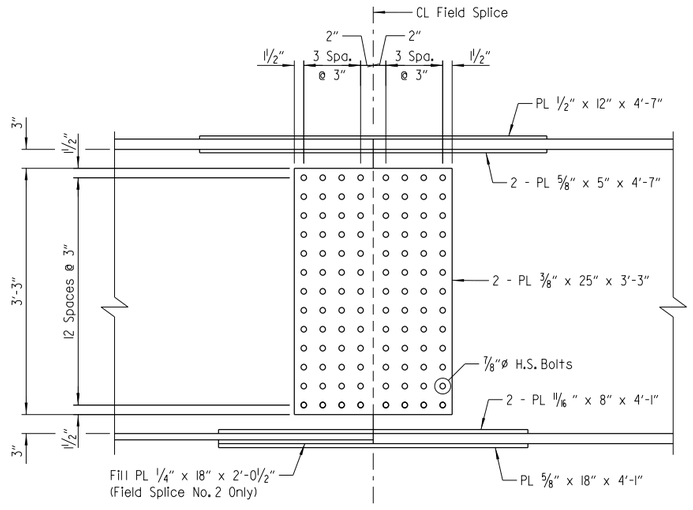
TOP FLANGE SPLICE

Scale: 1" = 1'-0"



BOTTOM FLANGE SPLICE

Scale: 1" = 1'-0"



ELEVATION OF FIELD SPLICE NO. 1 & NO. 2

Scale: 1" = 1'-0"

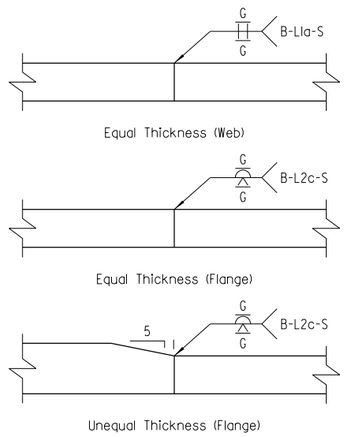
Notes:

All field splice bolts shall be 7/8"ø H.S. bolts.

All holes for splice bolts shall be 15/16 "ø.

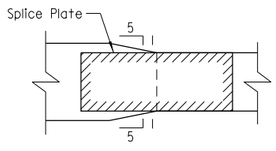
All field splice plates shall be AASHTO M270, GR. 50 steel.

Bolted field splices shown may be eliminated or shop welded splices may be substituted with approval of the Engineer. Payment will be made on the basis of the plan quantities.



DETAILS OF WELDED SPLICES

Scale: NTS

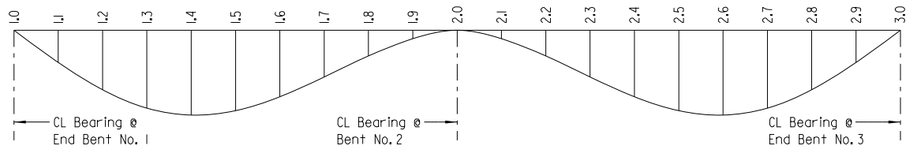


FIELD SPLICE AT UNEQUAL BOTTOM FLANGE WIDTH

Scale: NTS

TABLE OF DEAD LOAD DEFLECTIONS (Inches)

Point Of Deflection	Girders 1-3 & 8-10			Girders 4-7		
	Wt. Of Girder And Cross-Frames	Wt. Of Girder, Cross-Frames And Slab	Wt. Of Girder, Cross-Frames, Slab, Sidewalk & Parapet	Wt. Of Girder And Cross-Frames	Wt. Of Girder, Cross-Frames And Slab	Wt. Of Girder, Cross-Frames, Slab, Sidewalk & Parapet
1.0	0.00	0.00	0.00	0.00	0.00	0.00
1.1	0.170	0.735	1.025	0.172	0.764	0.876
1.2	0.308	1.332	1.858	0.313	1.386	1.592
1.3	0.402	1.732	2.421	0.407	1.803	2.076
1.4	0.438	1.882	2.638	0.444	1.959	2.261
1.5	0.417	1.784	2.510	0.422	1.857	2.148
1.6	0.346	1.472	2.083	0.351	1.531	1.777
1.7	0.246	1.036	1.475	0.249	1.077	1.254
1.8	0.132	0.547	0.785	0.134	0.569	0.666
1.9	0.046	0.186	0.266	0.047	0.193	0.227
2.0	0.00	0.00	0.00	0.00	0.00	0.00
2.1	0.005	0.033	0.062	0.005	0.034	0.038
2.2	0.050	0.242	0.380	0.050	0.251	0.289
2.3	0.119	0.561	0.846	0.121	0.583	0.672
2.4	0.193	0.902	1.333	0.197	0.940	1.085
2.5	0.254	1.182	1.725	0.259	1.232	1.422
2.6	0.280	1.299	1.884	0.285	1.354	1.565
2.7	0.265	1.227	1.773	0.269	1.278	1.478
2.8	0.207	0.960	1.384	0.211	1.000	1.156
2.9	0.115	0.534	0.770	0.117	0.556	0.643
3.0	0.00	0.00	0.00	0.00	0.00	0.00



DEAD LOAD DEFLECTION

Scale: NTS

NOTE:
Camber for dead load deflection plus vertical curve +/- 1/4" tolerance. Deflections shown are from a chord from centerline bearing to centerline bearing. Vertical curve corrections are not included. Negative sign (-) indicates point above chord.

STATE OF ARKANSAS
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BRIDGE ENGINEER

SHEET 5 OF 11
DETAILS OF 212'-0" CONTINUOUS COMPOSITE PLATE GIRDER UNIT

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: FEB. 2015 FILENAME: B080517_S5.dgn
CHECKED BY: DRG DATE: MAR. 2015 SCALE: As Shown
DESIGNED BY: JHR DATE: FEB. 2015

BRIDGE NO. 07345 DRAWING NO. 57082

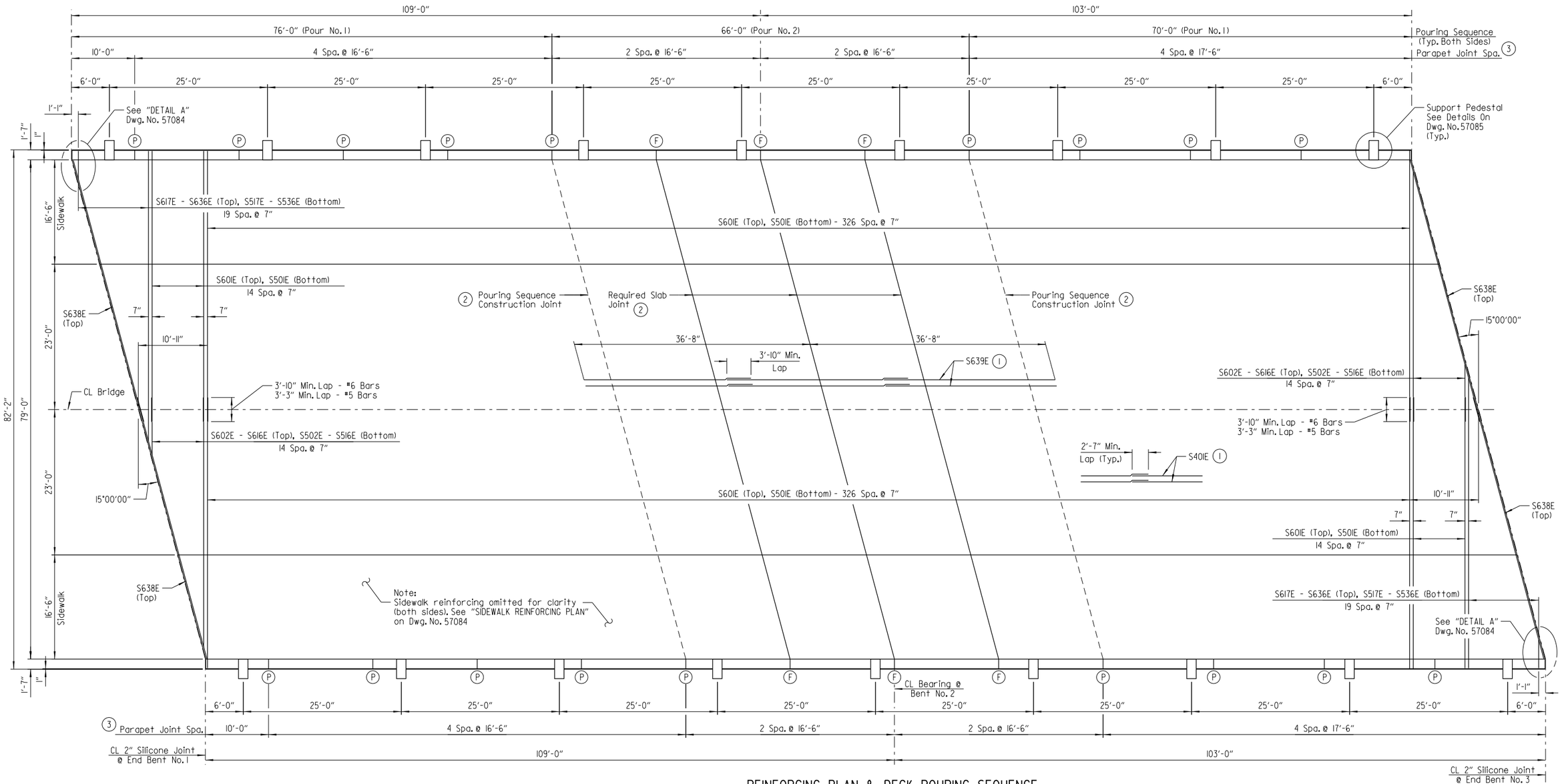
DRGOAD 5/19/2015 7:27:49 PM
WORKSPACE: AHTD Bridge
L:\202\2017590 - Control Field Access\Drawings\6TH_ST\B080517_S5.dgn
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080517	84	182
				(1) 07345		PL GIRDER UNIT		57083

(3) Parapet joints designated with symbol (F) shall be stopped 4" from top of slab. All other parapet joints with symbol (P) shall be partial depth joints stopped 1'-2" from top of slab.

Note:
Required slab joints and pouring sequence joints shall align with the parapet open joint at the gutterline.

* Refer to "HALF SECTION - SHOWING DECK REINFORCING" Dwg. No. 57079 for placement.



REINFORCING PLAN & DECK POURING SEQUENCE

Scale: 1/8" = 1'-0"

Note:
Pours with the same number may be placed simultaneously or separately. All Pours (1) must be placed before Pour (2) can be placed. 48 hours shall elapse before the end of a Pour and the start of the next Pour. 72 hours shall elapse between the end of a Pour and the start of an adjacent Pour. Any railing or sidewalk Pours made before the entire slab unit has been placed must be approved by the Engineer. A minimum of 72 hours shall elapse between the completion of the entire deck and the pouring of the sidewalk, and a minimum of 72 hours shall elapse between completion of the sidewalk and the Pouring of the parapet railing.

The Contractor must obtain approval from the Engineer for any deviations from the Pouring Sequence shown.

Concrete in bridge superstructure shall be consolidated for the entire Pour before any concrete has taken its initial set. This may require the use of a retarding agent.

(1) Place as shown in "HALF SECTION - SHOWING DECK REINFORCING" on Dwg. No. 57079

(2) See "SLAB JOINT DETAIL" on Dwg. No. 57084

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BRIDGE ENGINEER

SHEET 6 OF 11
DETAILS OF 212'-0" CONTINUOUS COMPOSITE PLATE GIRDER UNIT

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: FEB. 2015 FILENAME: B080517_S6.dgn
CHECKED BY: DRG DATE: MAR. 2015 SCALE: As Shown
DESIGNED BY: JHR DATE: FEB. 2015
BRIDGE NO. 07345 DRAWING NO. 57083

DRGOAD 5/19/2015 7:27:49 PM
WORKSPACE: AHTD Bridge
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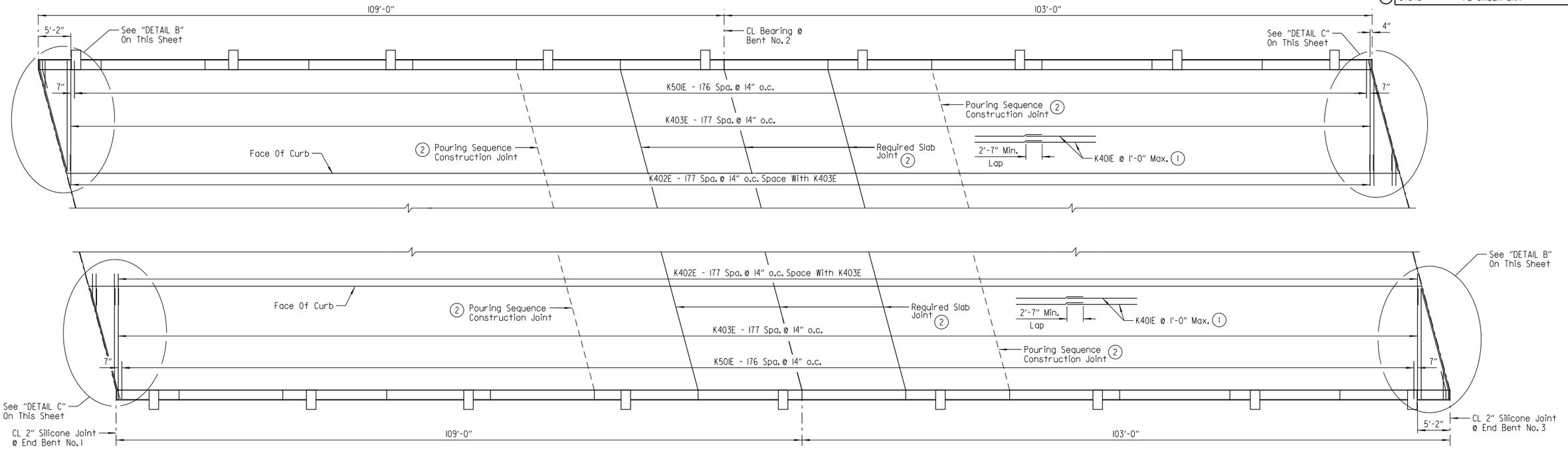
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080517	85	182
(1) 07345		PL GIRDER UNIT		57084

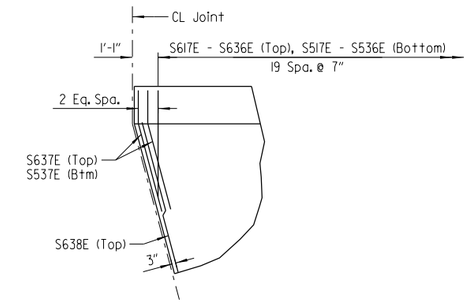
(1) Spaced as shown in "SIDEWALK DETAIL" on Dwg. No. 57079

(2) See "SLAB JOINT DETAIL".



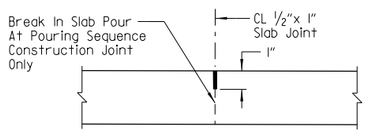
SIDEWALK REINFORCING PLAN

Scale: 1/8" = 1'-0"



DETAIL A

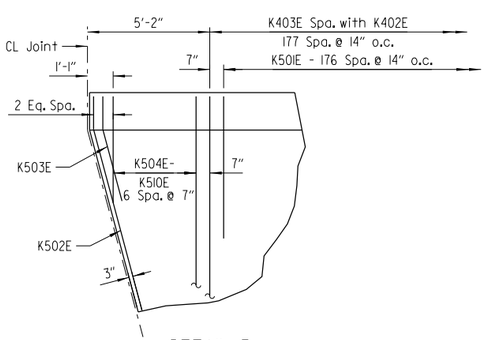
Showing Slab Reinforcing
Scale: NTS



The 1/2" x 1" Poured Joint Sealer (Type 3 or 4) in slab shall conform to Subsection 501.02(h) and 501.05(j). Backer Rod filler will not be required. The Poured Joint Sealer shall be paid for separately but shall be included in the item "BRIDGE CONSTRUCTION". Slab joints shall extend to the outside edge of the deck slab. Slab joints shall be installed before the sidewalk is poured. Slab joints in the sidewalk shall extend to the outside of the sidewalk and shall be installed before parapet railing is poured. If slab joints are to be sawed, they shall be sawed as soon as the concrete has sufficiently set to allow sawing of the joint without damage to the slab. Slab joints shall be placed at all pouring sequence construction joints and required slab joint locations. The joint sealer shall extend across the deck slab and across the top of the sidewalk. No joint sealer shall be placed on the deck slab under the sidewalk or parapet rail. Slab joints and pouring sequence joints shall align with parapet open joints.

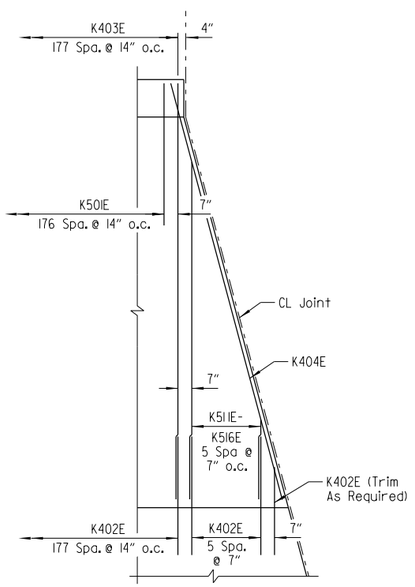
SLAB JOINT DETAIL

Scale: NTS



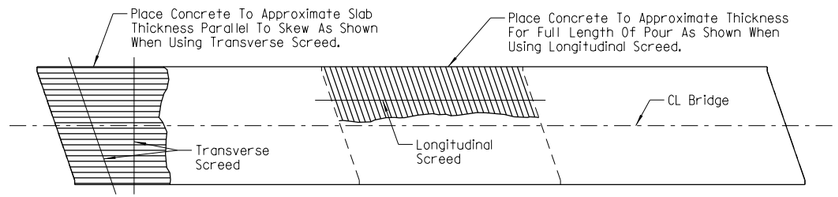
DETAIL B

Showing Sidewalk Reinforcing
Scale: NTS



DETAIL C

Showing Sidewalk Reinforcing
Scale: NTS



CONCRETE PLACEMENT PROCEDURE

Scale: NTS

NOTE:
At the Contractor's option, the Transverse Screed may be placed parallel to the skew or perpendicular to CL Bridge.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 8017
JOHN H. RUDDELL

Digitally Signed 05/19/2015

BRIDGE ENGINEER

SHEET 7 OF 11
DETAILS OF 212'-0" CONTINUOUS COMPOSITE PLATE GIRDER UNIT

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

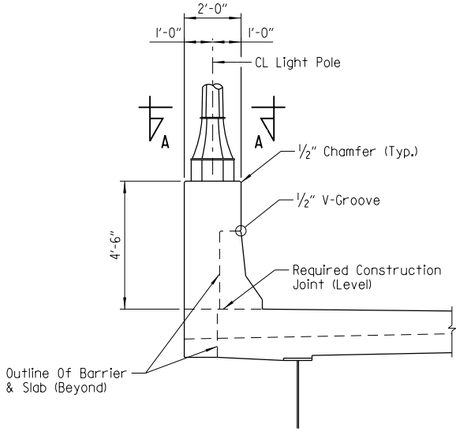
LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: FEB. 2015 FILENAME: B080517_S7.dgn
CHECKED BY: DRG DATE: MAR. 2015 SCALE: As Shown
DESIGNED BY: JHR DATE: FEB. 2015

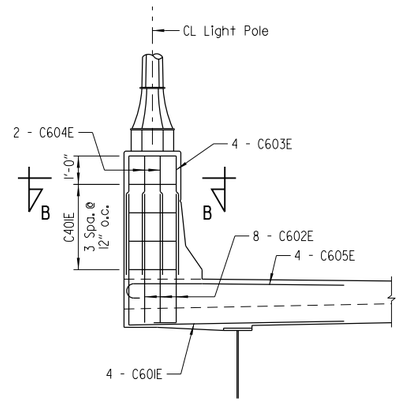
BRIDGE NO. 07345 DRAWING NO. 57084

DRGOAD 5/19/2015 7:27:50 PM
WORKSPACE: AHTD Bridge
L:\2012\12017590 - Cantrell Field Access\Drawings\6TH_ST\B080517_S7.dgn
REVISED DATE:

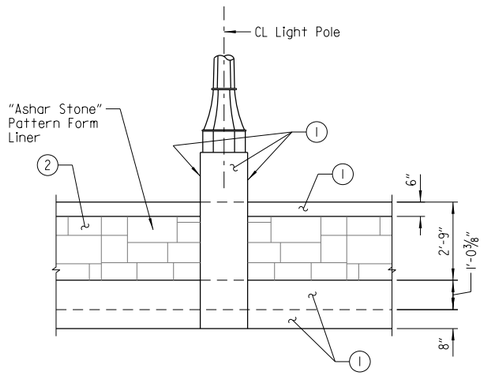
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080517	86	182
				(1) 07345		PL GIRDER UNIT		57085



SECTION SHOWING DIMENSIONS

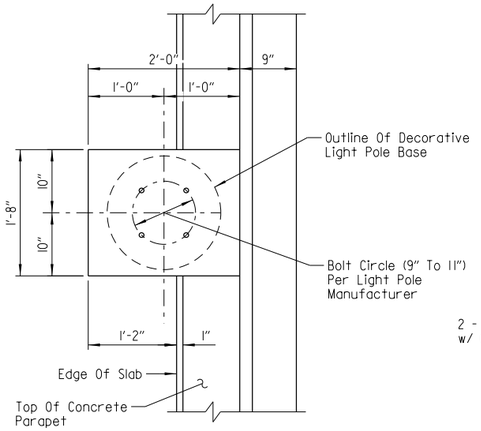


SECTION SHOWING REINFORCING

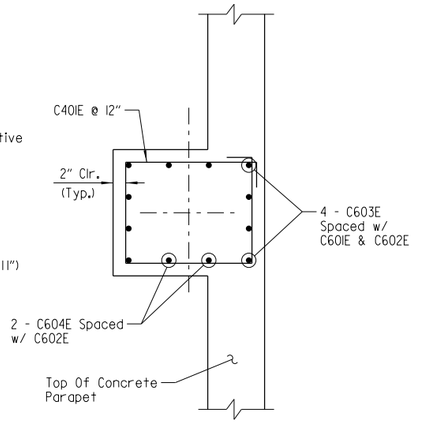


PANEL ELEVATION
(Showing Outside Face Of Parapet)
Scale: ⅜" = 1'-0"

PEDESTAL DETAIL
Scale: ⅜" = 1'-0"



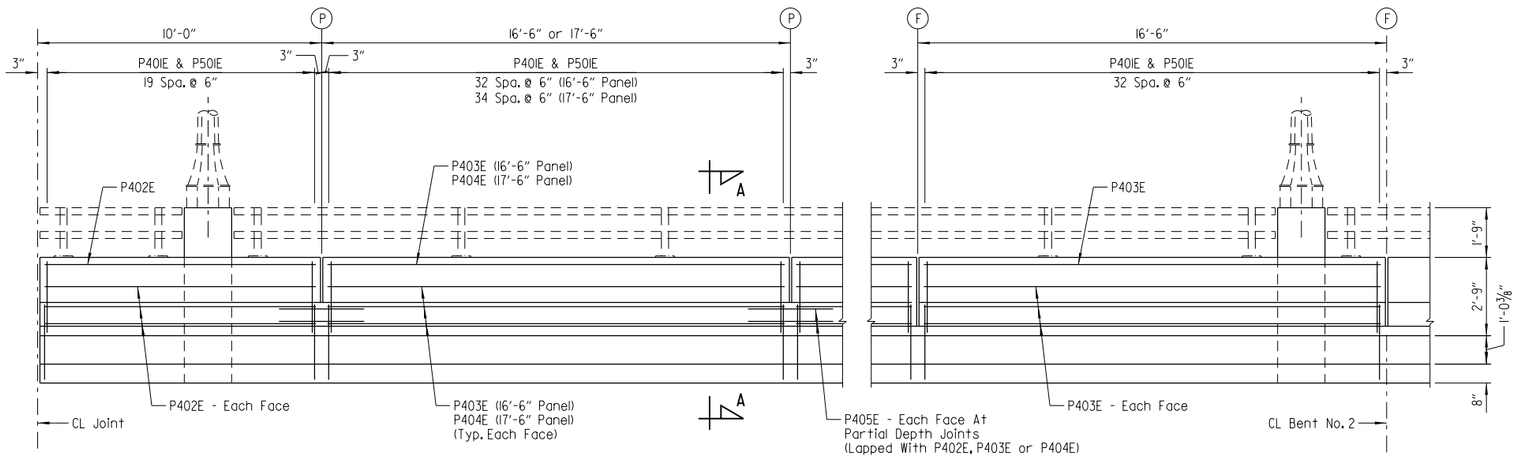
VIEW A-A
Scale" 1" = 1'-0"



SECTION B-B
Scale" 1" = 1'-0"

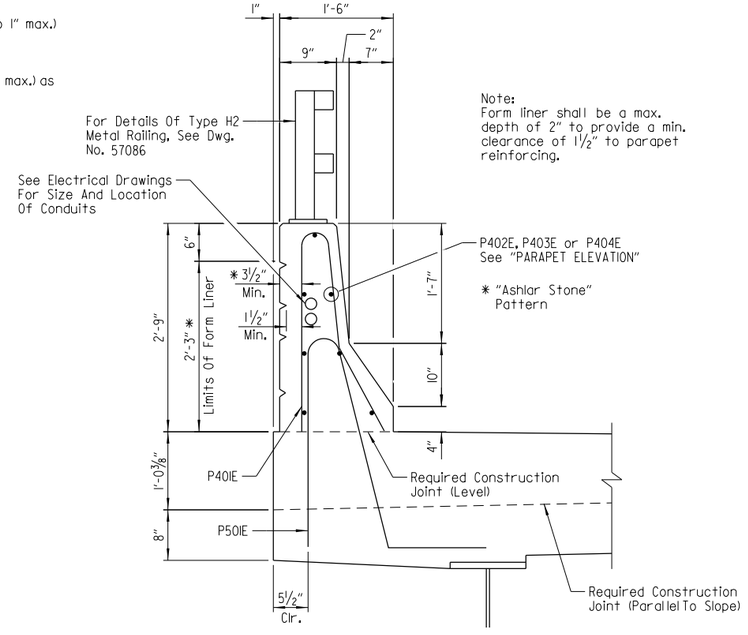
(P) CL partial-depth parapet joint (¼" to 1" max.) as shown on slab plan. Stop 1'-2" from top of sidewalk.

(F) CL full-depth parapet joint (¼" to 1" max.) as shown on slab plan. Stop 4" from top of sidewalk.

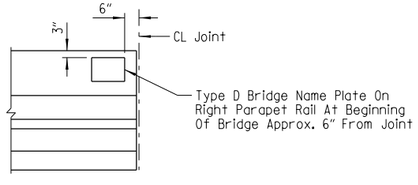


PARAPET ELEVATION
Scale: ⅜" = 1'-0"

Note:
For "BAR LIST" & "BAR BENDING DIAGRAMS", see Dwg. No. 57088



SECTION A-A
Scale" 1" = 1'-0"



VIEW SHOWING LOCATION OF NAME PLATE
(Showing Inside Face Of Parapet)
Scale: NTS

GENERAL NOTES

CONCRETE: All concrete shall be Class S(AE) with a minimum 28 day compressive strength f'c = 4000 psi.

REINFORCING STEEL: All reinforcing steel shall be Grade 60 conforming to AASHTO M31 or M322, Type A with mill test reports.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8017
JOHN H. RUDDELL

Digitally Signed 05/19/2015

BRIDGE ENGINEER

SHEET 8 OF 11
DETAILS OF 212'-0" CONTINUOUS COMPOSITE PLATE GIRDER UNIT

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: FEB. 2015 FILENAME: B080517_S8.dgn
CHECKED BY: DRG DATE: MAR. 2015 SCALE: As Shown
DESIGNED BY: JHR DATE: FEB. 2015
BRIDGE NO. 07345 DRAWING NO. 57085

DRGOAD 5/19/2015 7:27:50 PM
WORKSPACE: AHTD Bridge
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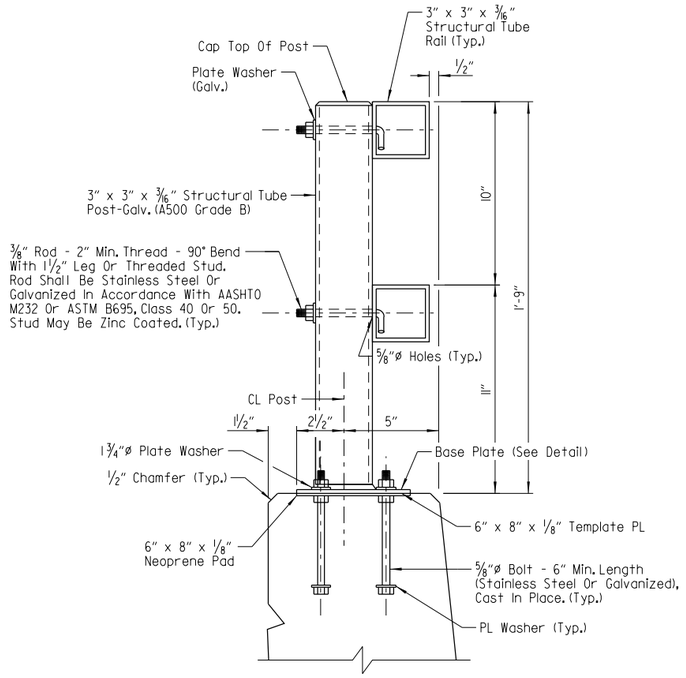
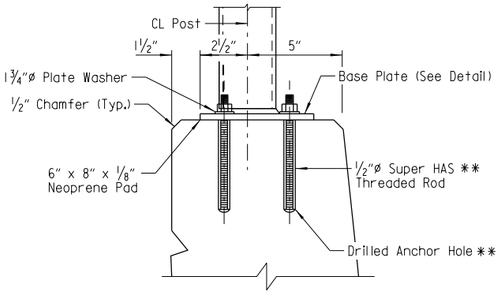
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080517	87	182
				1	07345	PL GIRDER UNIT		57086



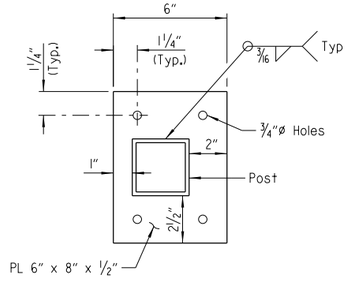
TYPE H2 RAIL

Scale: 3" = 1'-0"



** HILTI HIT RE 500 Epoxy Adhesive Anchor System with 4 1/2" embedment or an approved equal.

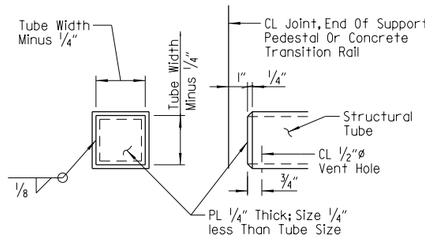
The HILTI Epoxy Adhesive Anchor System shall be installed in accordance with Manufacturer's recommendations.



BASE PLATE

DETAILS OF ALTERNATE POST ANCHOR SYSTEM

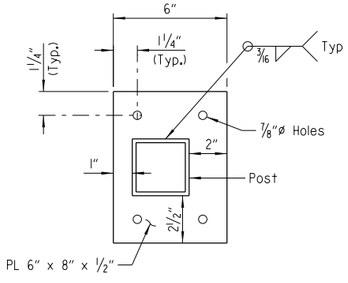
(Epoxy Adhesive Anchors)
Scale: 3" = 1'-0"



END ELEV. SIDE ELEV.

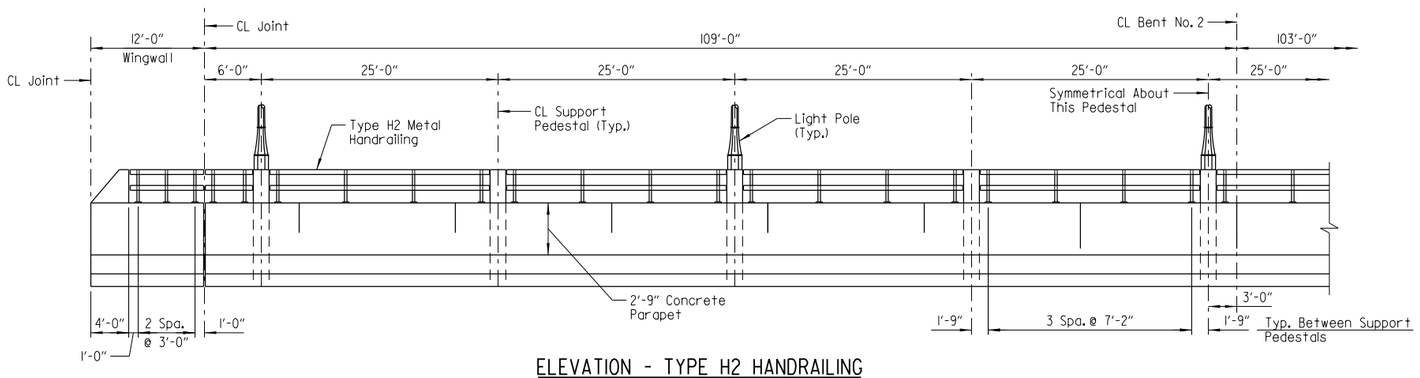
DETAILS OF END CAPS

Scale: 3" = 1'-0"



BASE PLATE

Scale: 3" = 1'-0"



ELEVATION - TYPE H2 HANDRAILING

Scale: NTS

NOTES FOR BRIDGE RAILING:

Rail layout shall conform to vertical and horizontal alignment of Bridge. All posts shall be vertical.

Base plates shall not be placed upon areas that are improperly finished, deformed or irregular.

Shop drawings showing details of railing shall be submitted and approval secured before fabrication is begun.

MATERIALS:

Tubing, Posts, and Accessories: AASHTO M270, Gr. 36 or ASTM A500-Grade B.

Railing End Caps shall conform to AASHTO M270, Gr. 36 galvanized.

Steel rail members shall be galvanized in accordance with AASHTO M111 after fabrication and shall receive a powder coating process after galvanizing. Galvanizing shall not interfere with the powder coating process. Galvanized surfaces shall be prepared in accordance with Subsection 807.87 and the powder coating manufacturer's recommendations before application of the powder coating process. The powder coating process shall be a two coat system applied using electrostatic spray. The base coat shall be a thermosetting epoxy powder with a minimum thickness of 2-4 mils. The top coat shall be a tough polyester powder coat with a minimum thickness of 2-4 mils. Color shall be Black equal to or close to Federal Std. 595B, color chip 27038. Coated galvanized framework shall have a salt spray resistance of 3,000 hours using ASTM B117 without loss of adhesion. The powder coating process shall be in accordance with Manufacturer's recommendations.

The Contractor shall submit a point color sample prior to fabrication for Owner's approval.

Cast in place anchor bolts shall be of stainless steel or high strength steel. Stainless steel anchor bolts shall conform to ASTM A139 or A320-Grade B8 with a minimum yield strength of 80,000 psi. High strength steel anchor bolts shall conform to AASHTO M164 or A354-Grade BC galvanized in accordance with AASHTO M232 or ASTM B695, Class 40 or 50.

Splice Set Screws shall conform to the requirments of ASTM A193 or A320-Gr.B8 (Stainless steel) or AASHTO M270, Gr.36 (Galvanized).

Nuts shall conform to AASHTO M292, Gr.8A (Stainless steel) or galvanized in accordance with AASHTO M232 or ASTM B695 Class 40 or 50.

Threads on bolts, screws and nuts shall conform to American Standard Coarse Series, Class 2 FIT, ASA Specification B1.1.

Washers shall be stainless steel and conform to the requirements of ASTM A276 or A167-Type 302 with dimensions meeting ASTM F436, or high strength steel conforming to AASHTO M293 and galvanized in accordance with AASHTO M232 or ASTM B695, Class 40 or 50.

Plate Washers shall be stainless steel and conform to the requirements of ASTM A167-Type 302 or AASHTO M270, Gr.36, galvanized in accordance with AASHTO M232 or ASTM B695, Class 40 or 50. Plate washers shall have dimensions meeting the requirments of ANSI/ASME B18.22.1, Type A plain washer (Wide Series).

Mixing of stainless steel and galvanized fasteners will not be permitted.

Metal Bridge Railing, including posts, fasteners, base plates, template plates, anchor bolts, neoprene pad, galvanizing and powder coatings; fabrication and erection; and all incidentals necessary to complete the work shall included in the item "BRIDGE CONSTRUCTION".

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8017
JOHN H. RUDDELL

Digitally Signed 05/19/2015

BRIDGE ENGINEER

SHEET 9 OF 11
DETAILS OF 212'-0" CONTINUOUS COMPOSITE PLATE GIRDER UNIT

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: FEB. 2015 FILENAME: B080517_S9.dgn
CHECKED BY: DRG DATE: MAR. 2015 SCALE: As Shown
DESIGNED BY: JHR DATE: FEB. 2015

BRIDGE NO. 07345 DRAWING NO. 57086

DRGOAD 5/19/2015 7:27:51 PM
WORKSPACE: AHTD Bridge
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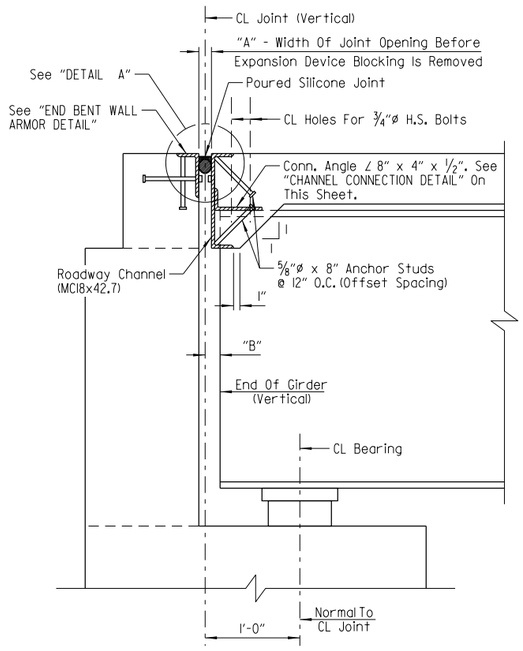
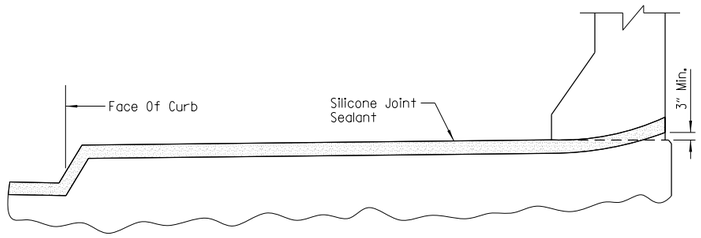
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080517	88	182
				(1) 07345		PL GIRDER UNIT		57087



SECTION THRU SILICONE JOINT

(Section Taken Normal To CL Joint)
Scale: NTS



JOINT SEAL PLACEMENT AT SIDEWALK AND PARAPET

Scale: NTS

Note:
Concrete shall be hand packed under the roadway channel & joint armor in the backwall.

SILICONE JOINT DATA

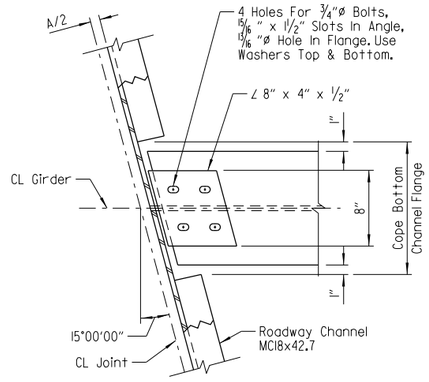
"A" Width Perpendicular To Joint At 24 Hour Average Temperature ∗ Of:			"B" Perpendicular To Joint At 60°F	"D"	Bumper Plate Size
40°F	60°F	80°F			
2 3/16"	2"	1 13/16"	2 1/4" ±	4 1/2"	1" x 1"

∗ The temperature used to set the joint opening shall be the approximate average air temperature during the 24 hour period immediately before the bolts are tightened. The Engineer shall establish the temperature. Interpolation of the table may be necessary.

Notes:
The temperature limitations recommended by the sealant manufacturer shall be observed.

The sealant may be installed in skewed joints only when the average 24 hour air temperature is between 40° and 80°F.

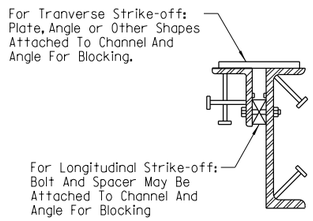
Backer Rod:
Use an appropriately sized backer rod at the depth shown in the manufacturer's literature based on the joint width at the time of sealing. Except as noted, do not install more backer rod than can be sealed in the same day. The Contractor shall verify separation of the backer rod from the joint material after the joint material has set.



CHANNEL CONNECTION DETAIL

Scale: NTS

One of two different blocking systems is required depending on the type of span finishing machine that is used.



Note:
Each expansion joint device shall be blocked in the shop by the fabricator to the dimension shown for 60°F and the blocking details shall be shown on the shop drawings. Blocking shall be placed within 2' of each end of the device and with a maximum spacing of 8'.

EXPANSION DEVICE INSTALLATION AT END BENTS:

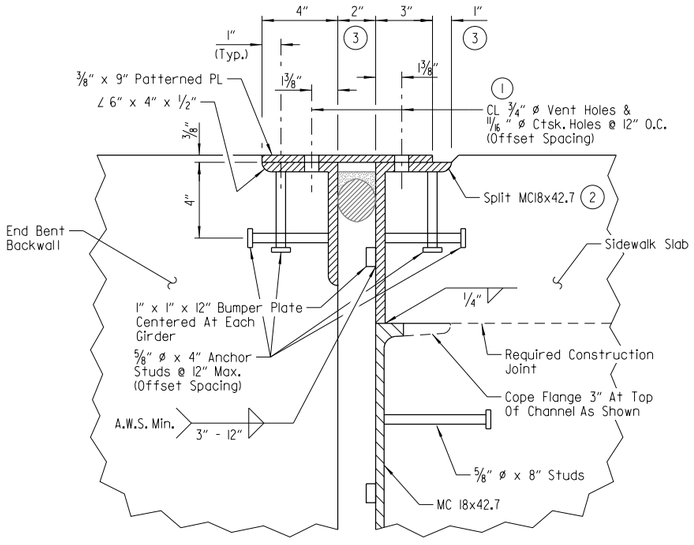
The Contractor may elect to install the expansion device using one of the following two alternatives.

1) The concrete span pour adjacent to joint shall be placed before the end bent backwall is placed. After the end bent backwall forms are in place and the beams erected, the blocked expansion device shall be installed and adjusted for grade. All connection bolts shall be fully tightened prior to placing the deck concrete adjacent to the bent. Immediately prior to pouring the backwall concrete, the blocking shall be removed, the opening adjusted for temperature, and the backwall constructed.

2) The backwall shall be poured to the optional construction joint after beams are erected. The blocked expansion device shall be installed and adjusted for grade. All connection bolts shall be fully tightened prior to placing the deck concrete adjacent to the bent. Immediately prior to pouring the remainder of the backwall concrete, the blocking shall be removed and the opening adjusted for temperature.

DETAILS FOR BLOCKING EXPANSION JOINT DEVICE

Scale: NTS



SECTION A-A

Scale: 3" = 1'-0"

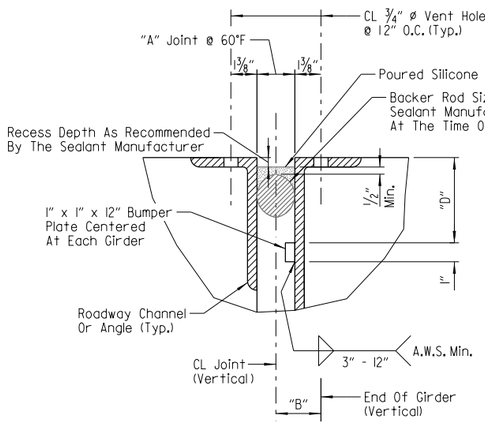
(1) Ctsk. 11/16" ø Holes in ⅜" Patterned PL. Tap 4" leg of angles for ASTM A449 ⅝" ø screw @ 12" O.C. Install screws in the shop and ship as a unit. Screws on span side to be removed. Screws on backwall side to remain in place after erection. See "EXPANSION DEVICE INSTALLATION AT END BENTS" on this drawing.

(2) Trim vertical leg of Split MC18x42.7 as needed.

(3) Dimensions shown @ 60°F

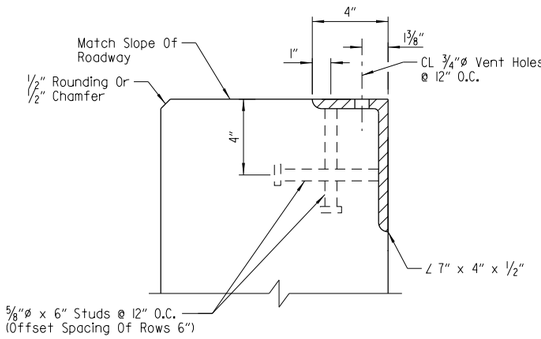
Sidewalk plates shall be AASHTO M270, Gr. 36 and shall be paid for as "BRIDGE CONSTRUCTION". The surfaces of the plates which will not be in contact with the concrete shall be cleaned and painted in accordance with Section 638, or as directed by the Engineer. Only one coat is required and shall be applied in the fabricator's shop. Painting shall not be paid for directly, but will be considered subsidiary to "BRIDGE CONSTRUCTION".

NOTE:
Concrete shall be hand packed under the joint armor in the sidewalk. For expansion joint detail, see "DETAIL A" on this drawing.



DETAIL A

Scale: 3" = 1'-0"



END BENT WALL ARMOR DETAIL

Scale: NTS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8017
JOHN H. RUDDELL

Digitally Signed 05/19/2015

BRIDGE ENGINEER

SHEET 10 OF 11
DETAILS OF 212'-0" CONTINUOUS COMPOSITE PLATE GIRDER UNIT

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: FEB. 2015 FILENAME: B080517_S10.dgn
CHECKED BY: DRG DATE: MAR. 2015 SCALE: As Shown
DESIGNED BY: JHR DATE: FEB. 2015

BRIDGE NO. 07345 DRAWING NO. 57087

DRGOAD 5/19/2015 7:27:51 PM
WORKSPACE: AHTD Bridge
L:\20\2\2017590 - Cantrell Field Access\Drawings\61H_ST\B080517_S10.dgn
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080517	89	182
				(1) 07345		PL GIRDER UNIT		57088

GENERAL NOTES

CONCRETE:

Concrete shall be poured in the dry and all exposed corners to be chamfered ¾" unless otherwise noted. All concrete shall be Class S(AE) with a minimum 28 day compressive strength f'c = 4,000 psi.

The superstructure details shown are for use when removable deck forming is used and are the basis for measurements of Class S(AE) Concrete. See Standard Drawing No. 55005 for allowable modifications and for tolerances when permanent steel deck forms are used.

Concrete in bridge superstructure shall be placed, consolidated and screeded off for the entire pour before any concrete has taken its initial set. This may require the use of a retarding agent.

The concrete deck shall be given a tine finish in accordance with Subsection 802.19 for Class 5 Tined Bridge Roadway Surface Finish. The 16'-6" sidewalk shall receive a broomed finish as specified in Subsection 802.19 for Class 6 Broomed Finish. Movement of the finishing machine across new concrete shall be on planks placed on the surface and shall be prohibited for 72 hours after finishing the pour. Sufficient concrete must be placed ahead of the strike-off to fully load the girder. A minimum of 72 hours shall elapse between completion of the bridge deck slab and the pouring of the sidewalk, and a minimum of 72 hours shall elapse between completion of the sidewalk and the pouring of the parapet railing. All railing pours made before the entire sidewalk has been placed and cured must be approved by the Engineer.

REINFORCING STEEL:

All reinforcing steel shall be Grade 60 conforming to AASHTO M31 or M322 Type A with mill test reports. The reinforcing steel is to be accurately located in the forms and firmly held in place by steel wire supports, sufficient in number and size to prevent displacement during the course of construction. The wire supports will not be paid for directly, but will be considered subsidiary to the item "BRIDGE CONSTRUCTION".

STRUCTURAL STEEL:

All structural steel shall be AASHTO M270, Gr. 50 unless noted otherwise and shall be included in the item "BRIDGE CONSTRUCTION". All Structural Steel shall be cleaned in accordance with Subsection 807.84 unless noted otherwise. Structural Steel completely embedded in concrete may be AASHTO M270, Gr. 36 unless otherwise noted. See Drawing No. 57089 for cleaning requirements of external load plates on elastomeric bearings.

Requests for substitution of structural steel shapes shown with shapes of greater size must be submitted by the Contractor to the Engineer for approval. Steels of equal or greater strengths will be accepted only when shown on approved shop drawings. Shapes and materials shown in the plans will be the basis of payment and no additional compensation will be made for any adjustments due to substitutions.

Drawings show general features of design only. Shop drawings shall be prepared in accordance with the specifications, submitted and approved before fabrication is begun.

Bolted field splices shown may be eliminated or shop welded splices may be substituted with approval of the Engineer. Payment will be made on the basis of plan quantities.

All girder webs & flanges of plate girders and field splice plates are considered main load carrying members and shall meet the Longitudinal Charpy V-Notch Test specified in Subsection 807.05. This work and material will not be paid for directly but are considered as subsidiary to the item "BRIDGE CONSTRUCTION".

Steel plates for main load carrying members (flange and web plates) and flange field splice plates shall be cut and fabricated so that the primary direction of rolling is parallel to the direction of the main tensile and/or compressive stresses.

Girder webs may be made by shop splicing with a minimum length of 25'-0" for sections. Flange plates longer than 50'-0" may be made by shop splicing with a minimum length of 25'-0" for sections. Material specifications and locations of shop-welded splice, if any, shall be shown on the shop drawings. No additional payment for these welded splices will be made.

All welding that is to be done during fabrication of structural steel, including temporary welds, shall be detailed on the shop drawings and submitted for approval. If additional welds are required, whether temporary or permanent, a formal request with detailed drawings shall be submitted to the Engineer for approval; however, additional welds used for attaching falsework support devices or screed rail supports to the structural steel that do not exceed the limitations of Subsection 802.13 will not require approval prior to construction. All welding shall conform to Subsection 807.26.

All girders shall be blocked in their true position with webs horizontal in the shop as specified in Subsection 807.54 (b)(2). The camber, length of sections, distance between bearings and opening of joints shall be measured with the girders in their true position and this information shall become a part of the permanent records of this job. The component parts shall be match marked in this assembly and these marks shall be shown on the erection diagram. All girder dimensions are based on a temperature of 60°F. A tolerance of +/- ¼" is allowed for camber.

Groove welds in flange and web plates shall be Quality Control (Q.C.) tested by nondestructive testing, as required by the Standard Specifications.

Fillet welds at flange to web plate connections shall be Quality Control (Q.C.) tested by the magnetic particle method.

All Quality Control (Q. C.) testing is at the Contractor's expense.

All connection plates & intermediate stiffeners shall be fabricated normal to the top flange and on the side of the girder web as indicated on the framing plans. No intermediate stiffeners are to be placed on the outside of the exterior girders except as noted. All bearing stiffeners shall be fabricated to be plumb in their final position.

Cross frames shall be installed as girders are erected. All bolts in diaphragms and field splices shall be installed and tightened in accordance with Subsection 807.71 prior to pouring of the concrete deck.

Field connections shall be bolted with high-strength bolts. Bolts shall be ¾"ø, except as noted, and open holes shall be 13/16", unless noted otherwise. Holes for ¾"ø bolts may be 15/16"ø if a washer is supplied for use under both the nut and head of the bolt. Bolt spacing shall be 2½" for ¾"ø bolts unless otherwise noted. For field splice bolts shall be 7/8"ø bolts unless otherwise noted. Open holes shall be 15/16"ø unless noted otherwise. Bolt spacing shall be 3" for 7/8"ø bolts unless otherwise noted. Bolts shall be placed with heads on the outside face of the exterior girder web and on the bottom of the girder flanges.

All contact surfaces between plates at field splices shall be free of paint, oil, rust or scale before assembly.

All stud shear connectors shall be granular flux filled, solid fluxed or equal and shall be automatically end welded in accordance with recommendations of the manufacturer.

Bearings shall be firmly seated in accordance with Subsection 808.08. This work is to be considered subsidiary to the item "BRIDGE CONSTRUCTION" and will not be paid for directly.

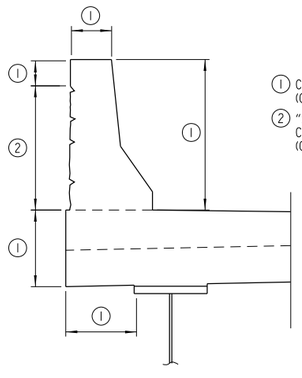
Anchor bolts shall be AASHTO designation M314 Gr. 55, including supplemental requirement S1, and shall be galvanized to conform to AASHTO M 232, Class C or AASHTO M298 Class 50. Anchor bolts will be included in the item "BRIDGE CONSTRUCTION".

SURFACE TREATMENT:

Class I Protective Surface Treatment shall be applied to the roadway surface and sidewalk surface. Class 3 Textured Coating Finish shall be applied as specified in SP "TEXTURED COATING FINISH".

PAINTING:

All structural steel except galvanized members, machined surfaces and surfaces in contact with concrete shall be painted as specified in Section 807. Color of the paint shall be Black, Fed. Std. 595B, Color Chip 27038. See Subsection 807.75.



1. Class 3 Textured Coating Finish (Color = Brown, Color Chip No. 33522)
2. "Ashlar Stone" Pattern And Class 3 Textured Coating Finish (Color = Brown, Color Chip No. 30219)

TEXTURED COATING FINISH

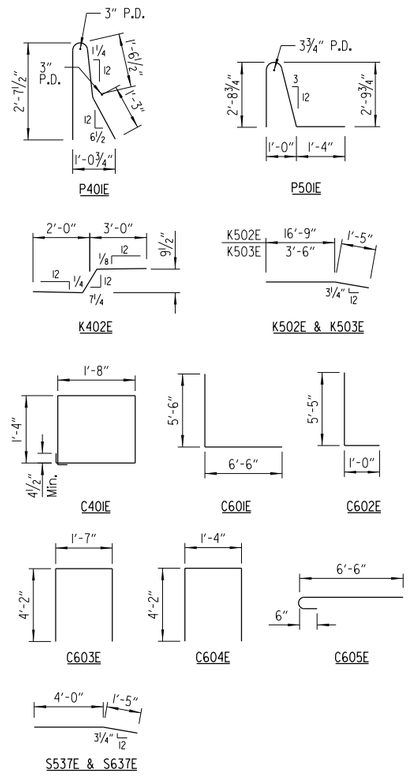
Scale: NTS

BAR LIST

Mark	No. Req'd.	Length	Pin. Dia.
S401E	1374	37'-6"	Str.
S501E	684	42'-7"	Str.
S502E To S516E	2 Each	8'-10" To 39'-4"	Str.
S517E To S536E	2 Each	4'-6" To 45'-10"	Str.
S537E	4	5'-5"	3¾"
S601E	684	42'-10"	Str.
S602E To S616E	2 Each	9'-1" To 39'-7"	Str.
S617E To S636E	2 Each	4'-6" To 45'-10"	Str.
S637E	4	5'-5"	4½"
S638E	4	42'-10"	Str.
S639E	261	27'-0"	Str.
K401E	216	37'-6"	Str.
K402E	370	5'-5"	2"
K403E	356	17'-7"	Str.
K404E	2	18'-4"	Str.
K501E	354	7'-0"	Str.
K502E	2	18'-2"	3¾"
K503E	2	4'-11"	3¾"
K504E To K510E	2 Each	4'-6" To 17'-6"	Str.
K511E To K516E	2 Each	14'-3" To 3'-4"	Str.
P401E	848	5'-6"	3"
P402E	14	9'-7"	Str.
P403E	112	16'-2"	Str.
P404E	56	17'-2"	Str.
P405E	72	5'-6"	Str.
P501E	848	7'-1"	3¾"
C401E	72	6'-4"	2"
C601E	72	11'-10"	4½"
C602E	144	6'-3"	4½"
C603E	72	9'-7"	4½"
C604E	36	9'-4"	4½"
C605E	72	7'-2"	4½"

NOTE:
Dimension of bars are out-to-out.
Bar designations ending with "E" indicate epoxy coated bars.

BAR BENDING DIAGRAMS



SHEET 11 OF 11
DETAILS OF 212'-0" CONTINUOUS COMPOSITE PLATE GIRDER UNIT

ROUTE SEC.

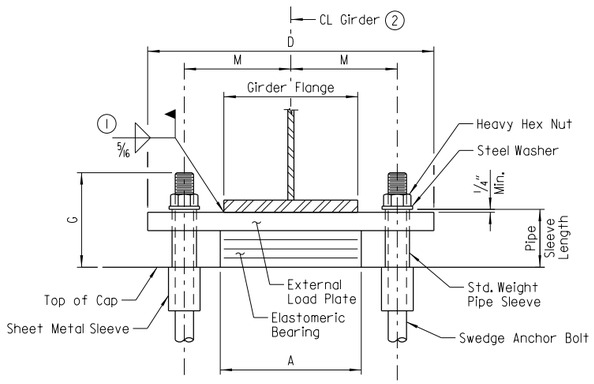
ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: FEB. 2015 FILENAME: B080517_S11.dgn
CHECKED BY: DRC DATE: MAR. 2015 SCALE: As Shown
DESIGNED BY: JHR DATE: FEB. 2015
BRIDGE NO. 07345 DRAWING NO. 57088

DRGOAD 5/19/2015 7:27:52 PM
WORKSPACE: AHTD Bridge
L:\2012\20175590 - Cantrell Field Access\Drawings\6TH_ST\B080517_S11.dgn
REVISED DATE:

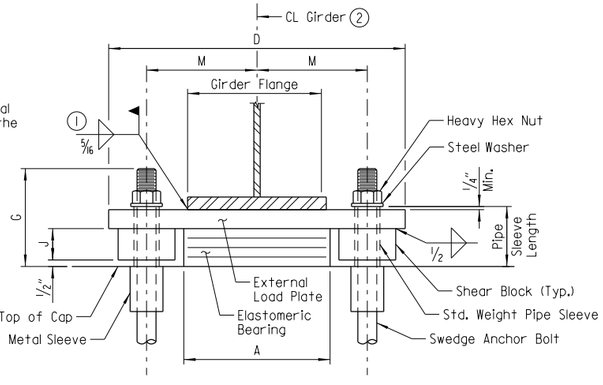
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080517	90	182
				1	07345	ELASTOMERIC BEARINGS		57089



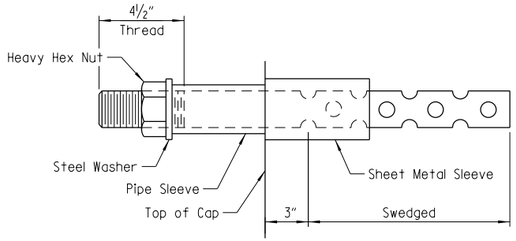
FRONT VIEW - AT BENT NOS. 1 & 3

(1) Care shall be taken to ensure that the external load plate is in full and complete contact with the girder flange before welding begins.

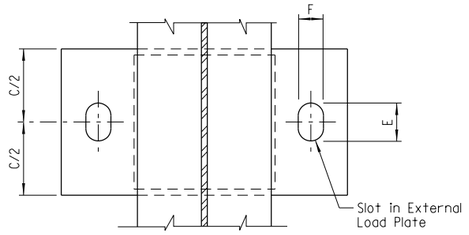
(2) Centerline elastomeric pad shall be aligned with centerline girder.



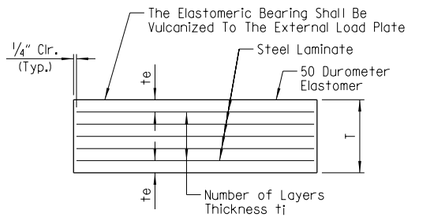
FRONT VIEW - AT BENT NO. 2



ANCHOR BOLT DETAIL

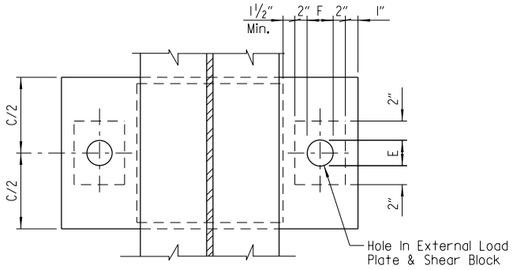


PLAN VIEW - AT BENT NOS. 1 & 3



t_e = Thickness Of Elastomer Cover On Top And Bottom Of Pad
t_i = Thickness Of Elastomer Between Steel Laminae
N = Number Of Elastomer Layers Of Thickness t_i

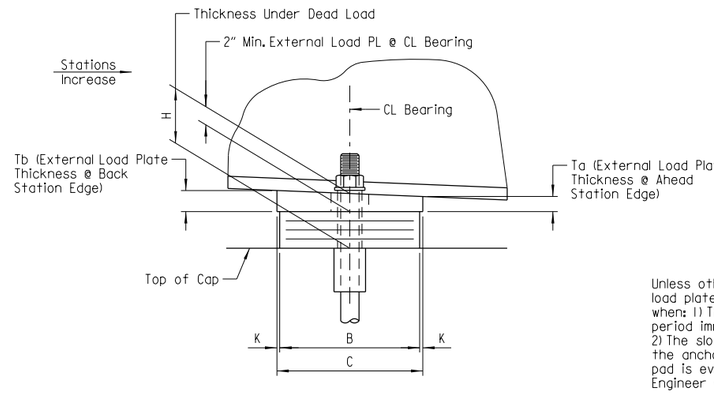
ELASTOMERIC BEARING



PLAN VIEW - AT BENT NO. 2

NOTE:
Anchor bolts may be cast in place or drilled and grouted into place. If anchor bolts are to be cast in place, the galvanized sheet metal sleeves will not be required.

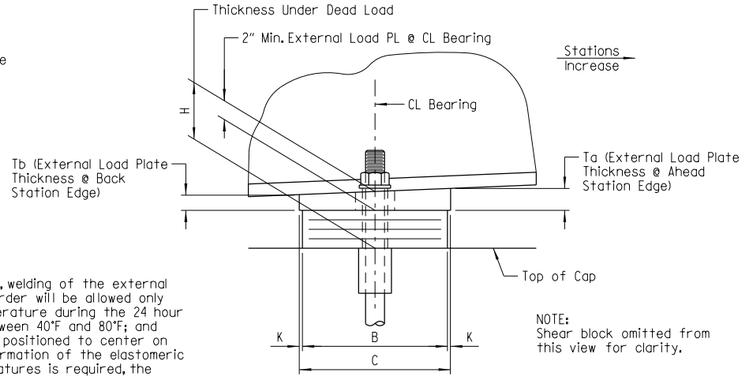
If anchor bolts are to be drilled and grouted in place, the galvanized sheet metal sleeves shall be cast in place as shown. Sleeves shall be dry packed with styrofoam, urethane foam or approved equal prior to pouring of concrete. After pouring of the cap and prior to erection of structural steel, the dry pack shall be removed and holes for the anchor bolts shall be accurately drilled into the masonry. Bolts placed in drilled holes shall be accurately set and fixed using a QPL approved epoxy or non-shrink grout that completely fills the holes. Galvanized sheet metal sleeves will not be paid for directly but will be included in the item "BRIDGE CONSTRUCTION".



SIDE VIEW - AT BENT NOS. 1 & 3

NOTE:
The direction of the bevel of the external load plate may not be accurately depicted with respect to Ta and Tb values shown in "TABLE OF FABRICATOR VARIABLES".

Unless otherwise approved by the Engineer, welding of the external load plate at expansion bearings to the girder will be allowed only when: 1) The approximate average air temperature during the 24 hour period immediately preceding welding is between 40°F and 80°F; and 2) The slots in the external load plate are positioned to center on the anchor bolts; and 3) No horizontal deformation of the elastomeric pad is evident. If welding at other temperatures is required, the Engineer will provide adjustment data.



NOTE:
Shear block omitted from this view for clarity.

SIDE VIEW - AT BENT NO. 2

GENERAL NOTES

Elastomeric bearings shall conform to Section 808 and shall be included in the item "BRIDGE CONSTRUCTION".

External load plates and shear blocks shall conform to AASHTO M270, Grade 50. Pipe sleeves shall be ASTM A53, Grade B, and shall be galvanized to conform to AASHTO M232, Class C or ASTM B695, Class 50.

External load plates and shear blocks shall be completely fabricated (including bevel and bolt holes) and shall be cleaned before vulcanizing to the elastomeric bearing. The surface in contact with the elastomeric bearing shall be cleaned in accordance with Subsection 808.03. Other surfaces shall be blast cleaned in accordance with Subsection 807.84(b) for painted steel and painted in accordance with Subsection 807.75. Mask areas of field welding. Painting will not be paid for directly but shall be included in the item "BRIDGE CONSTRUCTION".

Anchor bolts, washers and nuts shall conform to Subsection 807.07. The anchor bolt grade of steel shall be as specified in the "TABLE OF FABRICATOR VARIABLES". Indentations shall be circular with rounded bottoms and staggered as shown in the details.

External load plates, shear blocks, pipe sleeves, anchor bolts, washers and nuts shall be included in the item "BRIDGE CONSTRUCTION".

Bearings shall be seated in accordance with Subsection 808.08. This work and materials shall be included in the item "BRIDGE CONSTRUCTION".

TABLE OF FABRICATOR VARIABLES

Bridge No.	Location		Bearing Type	No. Of Bearings Each Bent	*Maximum Design Load (Kips)	Elastomeric Pad								External Load Plate									Anchor Bolt				
	Bent No(s).	Girder No.				G	H	A	B	N	t_i	t_e	No. & Thickness Of Steel Laminate	T	C	D	E	F	J	K	M	T_a	T_b	Anchor Bolt (Dia. x L)	Anchor Bolt Grade	Pipe Sleeve Size (Dia. x L)	Sheet Metal Sleeve Size (Dia. x L)	Steel Washer Size (O.D.)
07345	1	All	Exp.	10	178.6	8 3/16"	4 15/16"	18"	10"	4	1/2"	1/4"	5 @ 12 Ga.	3"	11"	30 1/2"	5"	3 1/8"	-	1/2"	12"	2.23"	1.77"	2" x 34"	55	2 1/2" x 5 3/16"	4" x 22 1/2"	3 3/4"
	2	All	Fix.	10	496.8	7 7/8"	4 3/8"	20"	15"	3	1/2"	1/4"	4 @ 12 Ga.	2 1/16"	16"	39 1/4"	3 1/8"	3 1/8"	1 15/16"	1/2"	15 1/16"	1.96"	2.04"	2" x 32"	55	2 1/2" x 4 5/8"	4" x 17"	3 3/4"
	3	All	Exp.	10	166.4	8 3/16"	4 15/16"	18"	10"	4	1/2"	1/4"	5 @ 12 Ga.	3"	11"	30 1/2"	5"	3 1/8"	-	1/2"	12"	1.73"	2.27"	2" x 34"	55	2 1/2" x 5 3/16"	4" x 22 1/2"	3 3/4"

* Maximum Design Load = Service I Limit State

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 8017
JOHN H. RUDDELL

Digitally Signed 05/19/2015

BRIDGE ENGINEER

DETAILS OF ELASTOMERIC BEARINGS

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: MAR. 2015 FILENAME: B080517_EI.dgn
CHECKED BY: JHR DATE: MAR. 2015 SCALE: As Shown
DESIGNED BY: DRG DATE: MAR. 2015

BRIDGE NO. 07345 DRAWING NO. 57089

DRGOAD 5/19/2015 1:27:53 PM
WORKSPACE: AHTD Bridge
L:\202\2017590 - Confrell Field Access\Drawings\6TH_ST\B080517_EI.dgn
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080517	91	182
(1) 07345		LIGHTING DETAILS		57090

ELECTRICAL SYMBOLS LEGEND

A	NEW ACORN STYLE DECORATIVE LIGHT FIXTURE, SEE NOTES, PLANS AND SCHEDULES FOR MORE INFORMATION.
PB	PULLBOX
	CONDUIT & WIRE AS NOTED IN NOTES AND IN SCHEDULES.
	RELAY CONTACT, NORMALLY OPEN.
20A/2P	CIRCUIT BREAKER, TRIP RATING SHOWN, 2-POLE UNLESS NOTED OTHERWISE.
SPD	SURGE PROTECTIVE DEVICE WITH INDICATING LIGHTS.
OR	3/4" x 10' COPPER CLAD GROUND ROD.
SP	SERVICE POINT LOCATION
	20 AMP DUPLEX RECEPTACLE, WITH GROUND WIRE, "GFCI" INDICATES GROUND FAULT CIRCUIT INTERRUPTER.

GENERAL NOTES:

1. SOME SYMBOLS OR ABBREVIATIONS MAY APPEAR ON THIS SHEET BUT NOT BE UTILIZED ON THE PROJECT.
2. LIGHTING LEGEND SHOWS EXAMPLE IDENTIFIERS, REFER TO LIGHT FIXTURE SCHEDULE FOR SPECIFIC REQUIREMENTS.
3. ALL PARTS OF THIS INSTALLATION SHALL BE IN ACCORDANCE WITH THE ARKANSAS HIGHWAY AND TRANSPORTATION DEPARTMENT STANDARDS AND DETAILS, AND WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITIONS.
4. CONDUIT INSTALLED UNDER ROADWAY SECTIONS SHALL BE INSTALLED BY PUSHING OR BORING METHODS. IF THE ENGINEER DETERMINES THIS IS NOT FEASABLE, THEN A TRENCHING METHOD MAY BE USED.
5. CONTRACTOR MAY USE HDPE OR PVC FOR BORING. SECTIONAL PVC SHALL BE UL LISTED AND MARKED FOR USE IN DIRECTIONAL BORING.

ABBREVIATIONS

A	AMP
ABC	ABOVE COUNTER
ACS	ACCESS CONTROL SYSTEM
ACU	AIR CONDITIONING UNIT
AHU	AIR HANDLING UNIT
AIC	AMPS INTERRUPTING CAPACITY
AM	AMP-METER
ANN	ANNUNCIATOR
AP	AERIAL PRIMARY
AS	AERIAL SECONDARY
ATS	AUTOMATIC TRANSFER SWITCH
AUX	AUXILIARY
BFI	BLOWN FUSE INDICATOR
BI	BYPASS ISOLATION
BKR	BREAKER
C	CONDUIT
CB	CIRCUIT BREAKER
CCTV	CLOSED CIRCUIT TELEVISION
CGRS	PVC COATED GALVANIZED RIGID STEEL
CKT	CIRCUIT
COM	COMMON
CONT	CONTINUOUS
CP	CONTROL PANEL
CPT	CONTROL POWER TRANSFORMER
CR	CONTROL RELAY
CRI	COLOR RENDERING INDEX
CS	CORD SET
CU	COEFFICIENT OF UTILIZATION
DEB	DIRECT EARTH BURIED
EC	EMPTY OR EMBEDDED CONDUIT
EF	EXHAUST FAN
EG	EQUIPMENT GROUND
EL	ELEVATION
EMT	ELECTRICAL METALLIC TUBING
ETM	ELASPED TIME METER
FC	FAN COIL
FDS	FUSED DISCONNECT SWITCH
FOC	FIBER OPTIC CABLE
FVNR	FULL VOLTAGE NON-REVERSING STARTER
FVR	FULL VOLTAGE REVERSING STARTER
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GND	GROUND
GRS	GALVANIZED RIGID STEEL
HID	HIGH INTENSITY DISCHARGE
HOA	HAND-OFF-AUTO
HP	HORSEPOWER OR HEAT PUMP
IDS	INTRUSION DETECTION SYSTEM
HR	HOUR
IG	ISOLATED GROUND
ISP	INDIVIDUALLY SHIELDED PAIR
JB	JUNCTION BOX
kVA	KILOVOLT-AMPERE
kVAR	KILOVOLT-AMPERE, REACTIVE
kW	KILOWATT
LA	LIGHTNING ARRESTER
LC	LIGHTING CONTACTOR
LLF	LIGHT LOSS FACTOR
LO	LUGS ONLY
LOR	LOCAL-OFF-REMOTE
LSI	LONG, SHORT, INSTANTANEOUS
LSIG	LONG, SHORT, INSTANTANEOUS, GROUND
LV	LOW VOLTAGE
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MCP	MOTOR CIRCUIT PROTECTOR
MFR	MANUFACTURER
MIN	MINIMUM
MLO	MAIN LUGS ONLY
MN	MASS NOTIFICATION
MON	MONACO
MS	MOTOR STARTER
MTS	MANUAL TRANSFER SWITCH
N	NEUTRAL
NFDS	NON-FUSED DISCONNECT SWITCH
NL	NIGHT LIGHT
OH	OVERHEAD
OHP	OVERHEAD PRIMARY
OHS	OVERHEAD SECONDARY
OL	OVERLOAD
PB	PUSH BUTTON
PEC	PHOTO ELECTRIC CELL
PF	POWER FACTOR
PFCC	POWER FACTOR CORRECTION CAPACITOR
PL	PILOT LIGHT
PMR	PHASE MONITOR RELAY
PNL	PANEL
PTT	PUSH-TO-TEST
PTZ	PAN-TILT-ZOOM
PVC	SCHEDULE 40 POLYVINYL CONDUIT
RECPT	RECEPTACLE
RVAT	REDUCED VOLTAGE AUTO-TRANSFORMER STARTER
SA	SURGE ARRESTER
SDBC	SOFT DRAWN BARE COPPER
SE	SERVICE ENTRANCE
SN	SOLID NEUTRAL
SPD	SURGE PROTECTIVE DEVICE
SS	STAINLESS STEEL
STA	STATION
SW	SWITCH
TC	TIME CLOCK
TD	TIME DELAY
TDD	TIME DELAY ON DE-ENERGIZATION
TDE	TIME DELAY ON ENERGIZATION
TEL	TELEPHONE
THD	TOTAL HARMONIC DISTORTION
TMGB	TELECOMMUNICATIONS MAIN GROUND BAR
TGB	TELECOMMUNICATIONS GROUND BAR
TR	TAMPER RESISTANT
UG	UNDERGROUND
UGE	UNDERGROUND ELECTRIC
UGP	UNDERGROUND PRIMARY
UGS	UNDERGROUND SECONDARY
UH	UNIT HEATER
UON	UNLESS OTHERWISE NOTED
UTP	UNSHIELDED TWISTED PAIR
V	VOLT
VA	VOLT-AMP
VFD	VARIABLE FREQUENCY DRIVE
VM	VOLT-METER
W	WATT OR WIRE
WAP	WIRELESS ACCESS POINT
WH	WEATHER HEAD
WM	WATT METER
WP	WEATHERPROOF
XFMR	TRANSFORMER

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.16153
NICHOLAS A. HOLLAND

Digitally Signed 05/19/2015

BRIDGE ENGINEER

ELECTRICAL LEGEND

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: NAH DATE: FEB. 2015 FILENAME: B080517_LPI.dgn
CHECKED BY: ECF DATE: FEB. 2015 SCALE: No Scale
DESIGNED BY: NAH DATE: FEB. 2015

BRIDGE NO. 07345 DRAWING NO. 57090

DRGOAD 5/19/2015 1:27:53 PM
WORKSPACE: AHTD Bridge
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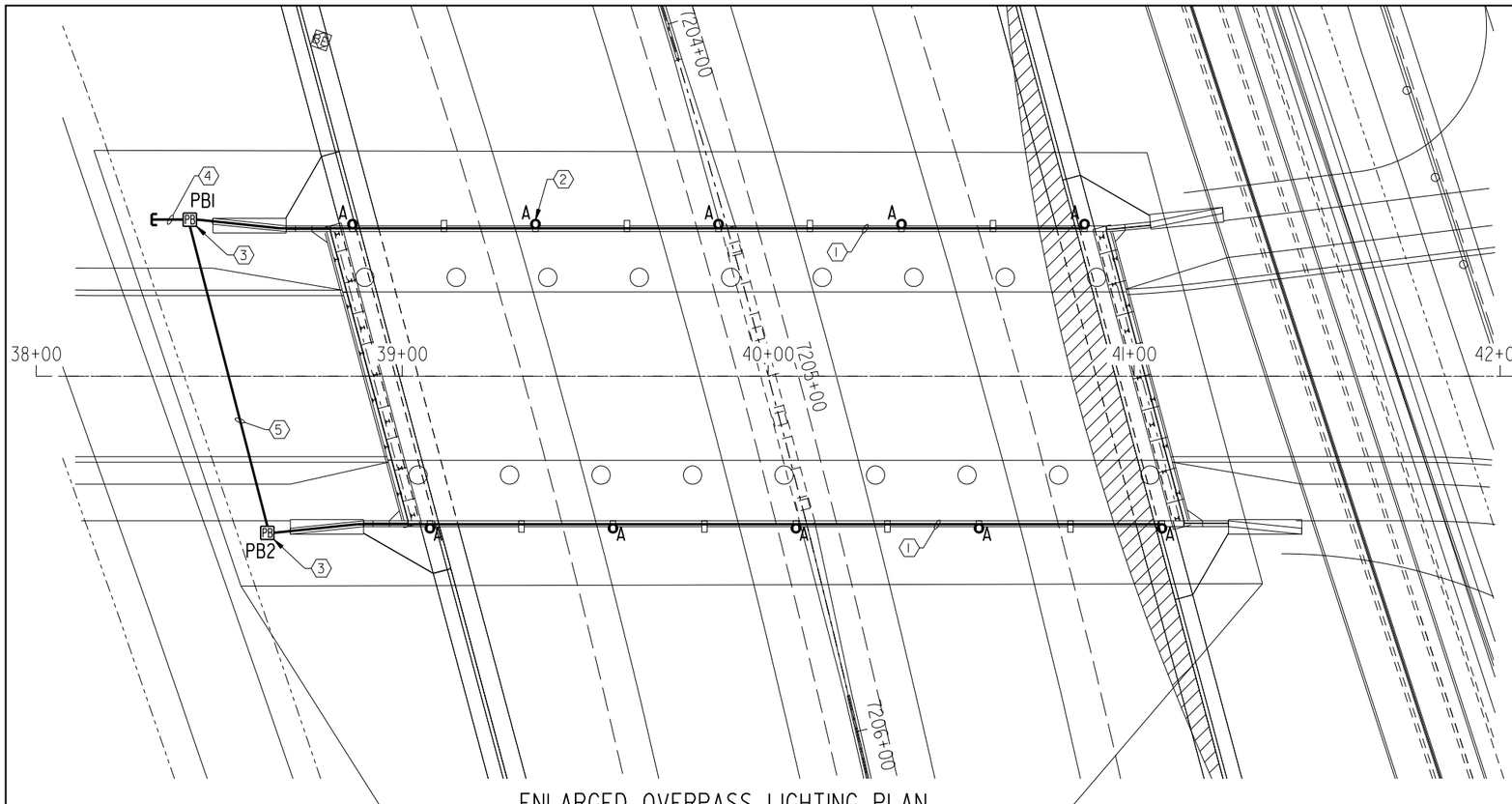
REVISED DATE:

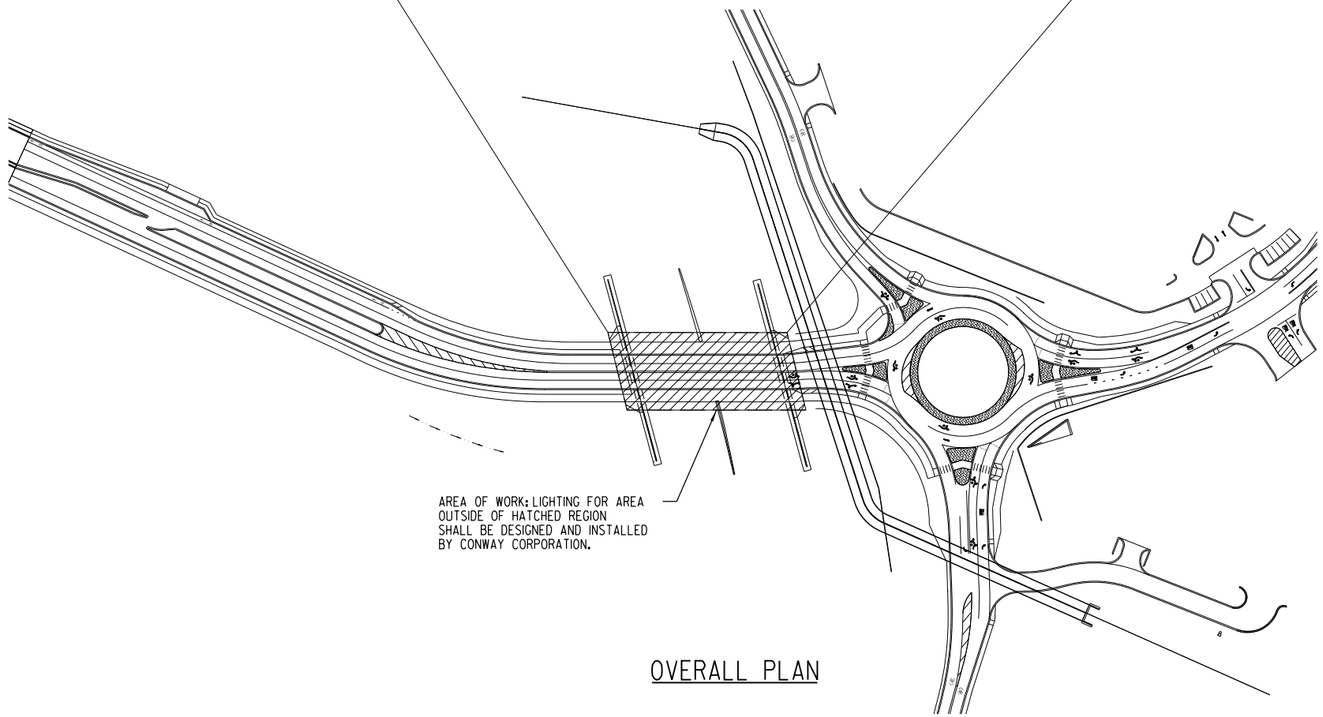
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080517	92	182
(1) 07345		LIGHTING DETAILS		57091



ENLARGED OVERPASS LIGHTING PLAN

SCALE: 1"=20'



OVERALL PLAN

LIGHT FIXTURE SCHEDULE

TYPE	DESCRIPTION	MANUFACTURER / CATALOG NUMBER	LAMPS WATTS	LAMPS TYPE	VOLTAGE	REMARKS
A	DECORATIVE ACORN FIXTURE	STERNBERG A850ASRLED/C56T/6ARC45T3R/MDL03/CDR/BKT	96W	LED	240V	1
	TAPERED OCTAGONAL POLE	WHATLEY XO65/DI6M/10/AB/BLK/30/-30				

STATISTICS (BASED ON 0.76 LLF)

DESCRIPTION	AVG	MAX	MIN	MAX/MIN	AVG/MIN
ROADWAY SIDE	1.2 fc	2.6 fc	0.4 fc	6.5:1	3.0:1
PEDESTRIAN SIDE	2.7 fc	3.1 fc	1.5 fc	2.1:1	1.8:1

FIXTURE SCHEDULE NOTES:

1. PROVIDE FIXTURES LISTED AND LABELED FOR WET LOCATION.

ILLUMINATION DESIGN CRITERIA TABLE

DESCRIPTION	AVG	MIN	AVG/MIN
ROADWAY SIDE	1.2 fc	0.4 fc	3.0:1
PEDESTRIAN SIDE	1.5 fc	0.5 fc	3.0:1

LIGHTING CALCULATIONS NOTES:

1. LIGHTING CALCULATIONS WERE PERFORMED USING LITHONIA LIGHTING VISUAL PROFESSIONAL EDITION VERSION 2.7 SOFTWARE.
2. LIGHTING LEVELS ARE IN FOOTCANDLE UNITS (fc).
3. DESIGN BASIS IS THE ILLUMINATING ENGINEERING SOCIETY OF NORTH AMERICA, IESNA LIGHTING HANDBOOK, 10TH EDITION AND RP-8-00.

GENERAL NOTES

1. OVERPASS LIGHTING IS DESIGNED AROUND STERNBERG MODEL#A850ASRLED-6ARC45T3R. FIXTURE MODEL IS REQUIRED FOR MAINTENANCE AND AESTHETIC REASONS.
2. FIXTURE SHALL BE MOUNTED ON 10' POLE WITH VIBRATION DAMPENER INSTALLED INTEGRAL TO THE POLE.
3. OVERPASS LIGHTING SHALL BE CONNECTED TO CONWAY CORPORATION ROADWAY LIGHTING PEDESTAL FOR POWER (INSTALLED BY OTHERS). CONTRACTOR SHALL COORDINATE WORK WITH CONWAY CORPORATION TO ENSURE PROPER OPERATION OF LIGHTING ON OVERPASS ONCE CONNECTED WITH CONWAY CORPORATION POWER SYSTEM.
4. COORDINATE ALL ELECTRICAL WORK WITH THE BRIDGE LAYOUT. CONTRACTOR SHALL COORDINATE LOCATION AND ROUTING OF CONDUIT WITH BRIDGE ENGINEER SUCH THAT THERE ARE MINIMUM PENETRATIONS TO THE BRIDGE STRUCTURE.
5. EXPOSED CONDUIT SHALL BE COATED GALVANIZED RIGID STEEL. CONDUIT EMBEDDED IN THE PARAPET WALL SHALL BE GALVANIZED RIGID STEEL. CONDUIT BURIED IN EARTH SHALL BE SCHEDULE 40 PVC. CONDUIT BURIED BELOW ROADWAY SHALL BE SCHEDULE 80 PVC.
6. LABEL CABLES IN ALL HANDHOLES AND JUNCTION BOXES. (TYPICAL)
7. CONTRACTOR SHALL INSTALL TWO (2) 1-1/2" GRSC IN PARAPET WALLS, ONE FOR POWER TO FIXTURES, ONE AS SPARE.
8. LIGHT FIXTURE AND POLE COLORS SHALL BE COORDINATED AND SELECTED BY THE CITY OF CONWAY AND ENGINEER DURING SHOP DRAWING REVIEW. ALL FIXTURES SHALL BE WET LOCATION RATED.

KEYED NOTES:

(1) INSTALL NEW ALUMINUM CONDUCTORS (2#10, 1#10 EGC) 1-1/2"C. TYPICAL.

(2) INSTALL NEW DECORATIVE ACORN LED FIXTURE, SEE SCHEDULE AND DETAILS FOR MORE INFORMATION. TYPICAL.

(3) INSTALL NEW PULLBOX, SEE DETAILS FOR MORE INFORMATION.

(4) INSTALL WATERTIGHT CAPPED 1-1/2" STUBOUT AS INDICATED. COORDINATE CONNECTION TO LIGHTING SYSTEM AND SERVICE POINT WITH CONWAY CORPORATION.

(5) INSTALL 1-1/2" SCHEDULE 80 PVC MINIMUM OF 24" BELOW ROADWAY SURFACE. COORDINATE WITH BRIDGE AND ROADWAY INSTALLATION.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.16153
NICHOLAS A. HOLLAND

Digitally Signed 05/19/2015

BRIDGE ENGINEER

BRIDGE LIGHTING INSTALLATION PLAN

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

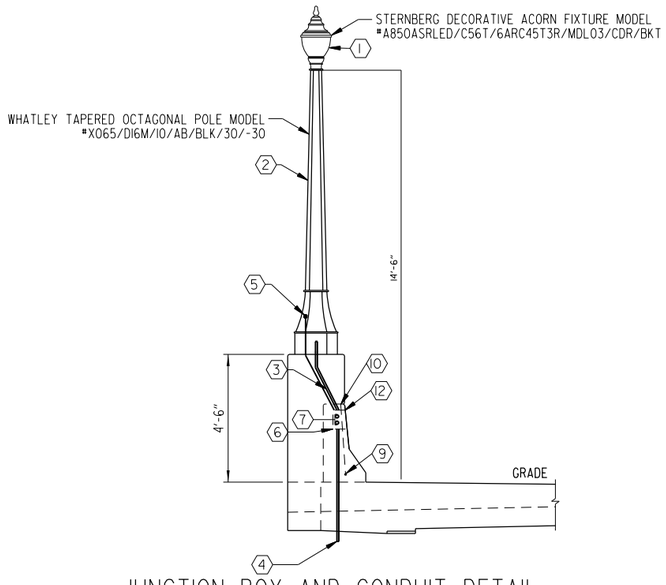
LITTLE ROCK, ARK.

DRAWN BY: NAH DATE: FEB. 2015 FILENAME: B080517_LP2.dgn
CHECKED BY: ECF DATE: FEB. 2015 SCALE: 1" = 20'
DESIGNED BY: NAH DATE: FEB. 2015

BRIDGE NO. 07345 DRAWING NO. 57091

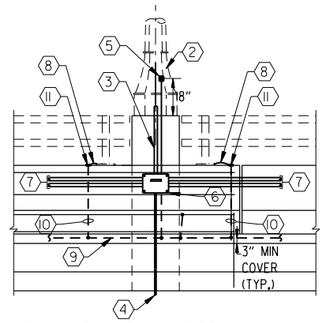
DRGOAD 5/19/2015 7:27:57 PM
WORKSPACE: AHTD Bridge
L:\2012\2017590 - Conrrell\Field Access\Drawings\61H_ST\B080517_LP2.dgn
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080517	93	182
				(1) 07345		LIGHTING DETAILS		57092



JUNCTION BOX AND CONDUIT DETAIL - TYPICAL SECTION VIEW

SCALE: NONE



JUNCTION BOX AND CONDUIT DETAIL - ELEVATION VIEW

SCALE: NONE

GENERAL NOTES:

1. POWER MARKING TAPES SHALL BE DETECTABLE TYPE CONSTRUCTION WITH RED BACKGROUND AND BLACK LETTERING.
2. COMMUNICATION MARKING TAPES SHALL BE DETECTABLE TYPE CONSTRUCTION WITH ORANGE BACKGROUND AND BLACK LETTERING, "TELEPHONE LINE" OR "FIBER OPTIC LINE" RESPECTIVELY.
3. TAPE SHALL BE DETECTABLE, DURABLE, HIGHLY VISIBLE, RESISTANT TO ELEMENTS, MEETING AND/OR EXCEEDING ALL INDUSTRY STANDARDS.

UNDERGROUND DETECTABLE WARNING TAPE

SCALE: N.T.S.

KEYED NOTES:

(1) INSTALL NEW LIGHT FIXTURE ON POLE. SEE FIXTURE SCHEDULE AND LAYOUT PLANS FOR MORE INFORMATION.

(2) INSTALL NEW POLE WITH HANDHOLE FACING WALKWAY. INSTALL NEW IN-LINE FUSE HOLDERS AND FUSES, EQUIPMENT SHALL BE FULLY ACCESSIBLE VIA HANDHOLE.

(3) INSTALL NEW 1" GRSC AND CONDUCTORS FROM POLE BASE TO ADJACENT JUNCTION BOX.

(4) INSTALL NEW 1/2" GRSC FROM JUNCTION BOX TO UNDERSIDE OF BRIDGE, EXTEND 3" BELOW BRIDGE AND INSTALL DRAIN/BREATHER AT END.

(5) INSTALL NEW GROUNDING BUSHING, BOND DEDICATED #6 AWG COPPER GROUND WIRE TO POLES, TO BUSHING AND TO JUNCTION BOXES.

(6) INSTALL NEW NEMA 4X STAINLESS STEEL JUNCTION BOX RECESSED IN THE PARAPET WALL WITH THE FOLLOWING ITEMS. SEE DETAIL C THIS SHEET:
- A. 8"H x 8"W x 6"D MINIMUM SIZE. TOP OF BOX SHALL BE A MINIMUM OF 8" BELOW TOP OF BARRIER WALL.
- B. CAPTIVE TYPE TAMPER RESISTANT, FLUSH HEAD SS SCREWS FOR GASKETED COVER.
- C. MOUNTING BACK PANEL WITH JUNCTION BOX, FULL SIZED.
- D. 2"x4"x1/4" COPPER GROUND BAR WITH MINIMUM OF 10 LUGS.
- E. EXTERNAL GROUND LUG, BOND TO GROUND CONDUCTOR USING #6 AWG COPPER.

(7) BOND GROUND CONDUCTORS TO JUNCTION BOX, GROUND BAR AND ALL OTHER GROUND CONDUCTORS. LABEL USING CABLE MARKERS AND COLOR CODE TAPE ALL CONDUCTORS WITHIN EACH JUNCTION BOX.
INSTALL NEW (2) 1-1/2" GRS ELECTRICAL CONDUIT DUCT SYSTEM ALONG ENTIRE STRUCTURE:
- A. LIGHTING CIRCUITS 240V IN 1-1/2" GRSC
- B. SPARE 1-1/2" GRSC WITH PULLWIRE

SECURE ELECTRICAL CONDUIT DUCT SYSTEM AND INSTALL GROUNDING AND BONDING TYPE BUSHINGS WITHIN ALL JUNCTION BOXES, BONDED TO GROUND. INSTALL NEW EXPANSION GRSC CONDUIT FITTINGS AT ALL EXPANSION JOINTS, SEE DETAIL D THIS SHEET.

(8) INSTALL NEW GROUNDING COMPRESSION TERMINAL AND CONNECT TO EMBEDDED 4 LUG GROUNDING PLATE VIA #6 AWG GROUND WIRE. TYPICAL FOR EACH SECTION OF HAND RAIL, UTILIZE INSTILLATION METHODS TO PREVENT VANDALISM.

(9) INSTALL NEW DEDICATED #4/0 AWG COPPER GROUND WIRE ALONG ENTIRE STRUCTURE. EMBEDDED IN BRIDGE WALL. BOND POLE TO GROUND WIRE AND BOND JUNCTION BOX TO GROUND WIRE USING #6 AWG COPPER AND EXOTHERMIC WELDS ONLY.

(10) INSTALL #2 AWG COPPER GROUND WIRE AND BOND EACH HAND RAIL SECTION TO GROUND WIRE SYSTEM. UTILIZE APPROVED INSTALLATION METHODS TO PREVENT VANDALISM.

(11) INSTALL NEW EMBEDDED 4 LUG GROUNDING PLATE. CONNECT #2 GROUND WIRE USING GROUNDING COMPRESSION TERMINAL (TYPICAL).

(12) ALL JUNCTION BOXES SHALL BE FLUSH WITH CONCRETE SURFACE.

GENERAL NOTES:

1. INSTALL NEW TAPERED, OCTAGONAL, FIBERGLASS COMPOSITE CORE, ELASTOMERIC CLAD URETHANE POLE SHAFT, ACCESSIBLE GROUNDING PROVISION, BASE COVER, VIBRATION DAMPER, ALL REQUIRED MOUNTING ACCESSORIES, SEE DETAILS FOR SIZE AND GAUGE REQUIREMENTS. INSTALL HANDHOLE WITH CAPTIVE TYPE TAMPER RESISTANT SCREWS FACING THE PEDESTRIAN WALKWAY. HANDHOLE COVER SHALL HAVE SAFETY CHAIN SECURED TO POLE INTERIOR. POLE SHALL BE DESIGNED FOR THE TOTAL EFFECTIVE PROJECTED AREA OF ALL LIGHT FIXTURES AT A 90 MPH BASIC WIND SPEED WITH 3 SECOND GUST. ALL POLES SHALL BE DESIGNED TO MEET THE AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, CURRENT EDITION.

2. LIGHT FIXTURE AND POLE COLORS SHALL BE COORDINATED AND SELECTED BY THE OWNER AND ENGINEER DURING SHOP DRAWING REVIEW. POLE SHALL INCLUDE PRE-TREATMENT PROCESSES AND POWDER COAT FINISH TO PREVENT CORROSION. ALL FIXTURES TO BE WET LOCATION RATED.

3. ACCEPTANCE CRITERIA SHALL CONSIST OF THE FOLLOWING:
   - A. SUBMIT COMPLETE SHOP DRAWING DATA FOR FIXTURE AND LAMP, INCLUDING IES FILE AND LLF CALCULATION.
   - B. SUBMIT COMPLETE POINT-BY-POINT PHOTOMETRIC LIGHTING ANALYSIS OF ALL GIVEN AREAS FOR BOTH INITIAL LUMEN AND LLF CALCULATIONS.
   - C. LLF DESIGN, LIGHTING ANALYSIS VALUES SHALL MEET OR EXCEED THE ILLUMINATION DESIGN CRITERIA TABLE REQUIREMENTS, NO EXCEPTION.

4. FINAL ACCEPTANCE TESTING PROCEDURE SHALL CONSIST OF THE FOLLOWING:
   - A. SUBMIT TEST PROCEDURE FOR REVIEW AND APPROVAL.
   - B. CONDUCT MINIMUM 14-DAY FINAL ACCEPTANCE TEST FOR THE COMPLETE LIGHTING SYSTEM. CORRECT MALFUNCTIONING EQUIPMENT AND RETEST, OTHERWISE REMOVE AND REPLACE WITH NEW EQUIPMENT.
   - C. REPLACE BURNED OUT AND NOTICEABLY DIM LAMPS AND RETEST.
   - D. DURING FINAL ACCEPTANCE TEST PERIOD, TAKE FIELD LIGHT LEVEL MEASUREMENTS (ILLUMINANCE) ALONG THE ENTIRE STRUCTURE, IN A 10' GRID PATTERN COVERING ALL PAVED AREAS. FIELD LEVEL MEASUREMENTS AND CALCULATIONS SHALL MEET OR EXCEED INITIAL LUMEN DESIGN CALCULATIONS. COORDINATE FIELD WORK WITH OWNER AND ENGINEER.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.16153
NICHOLAS A. HOLLAND

Digitally Signed 05/19/2015

BRIDGE ENGINEER

SHEET 1 OF 2
ELECTRICAL DETAILS

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: NAH DATE: FEB. 2015 FILENAME: B080517_LP3.dgn
CHECKED BY: ECF DATE: FEB. 2015 SCALE: No Scale
DESIGNED BY: NAH DATE: FEB. 2015

BRIDGE NO. 07345 DRAWING NO. 57092

DRGOAD 5/19/2015 7:27:57 PM
WORKSPACE: AHTD Bridge
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REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
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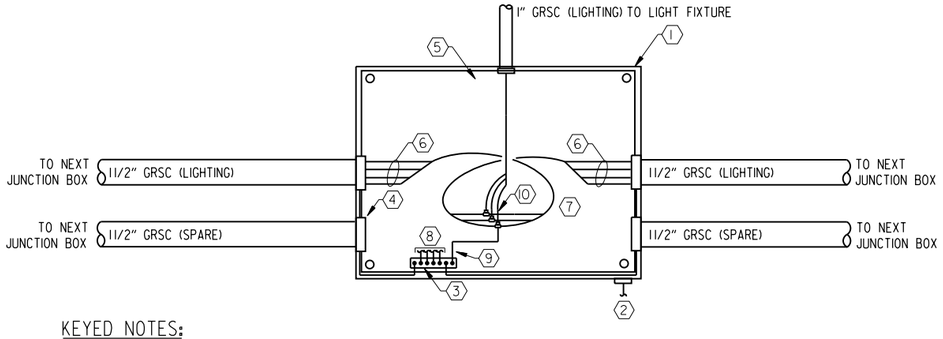
				JOB NO.		080517	94	182
				(1) 07345		LIGHTING DETAILS		57093

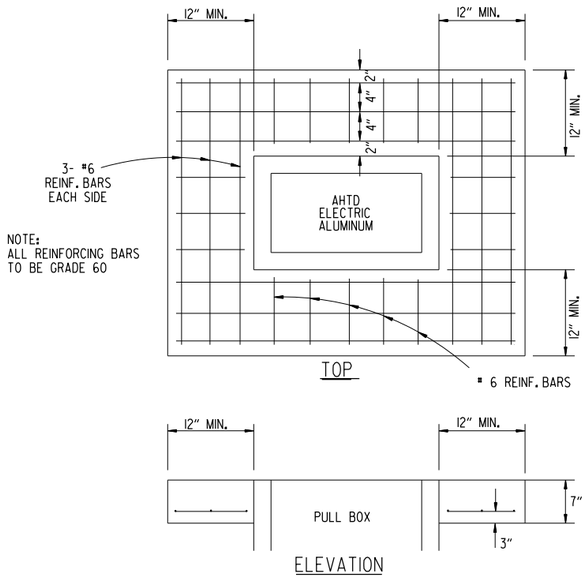


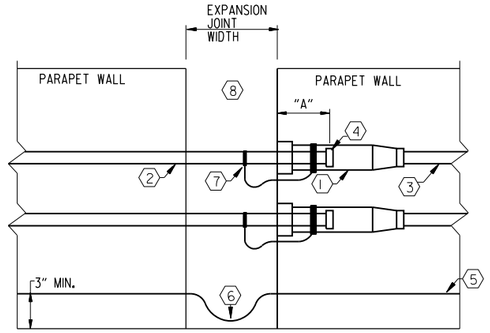
KEYED NOTES:

1. INSTALL NEW NEMA 4X STAINLESS STEEL JUNCTION BOX RECESSED IN PARAPET WALL WITH TAMPER RESISTANT CAPTIVE HARDWARE. TOP OF BOX SHALL BE A MINIMUM OF 8" BELOW TOP OF BARRIER WALL.
2. BOND EXTERNAL GROUND LUG USING #6 AWG COPPER TO #4/0 AWG GROUNDING CONDUCTOR SYSTEM.
3. INSTALL NEW COPPER GROUND BAR AND CONNECT ALL GROUND CONDUCTORS.
4. INSTALL NEW GROUNDING AND BONDING TYPE INSULATED BUSHINGS ON ALL CONDUITS AND BOND TO GROUND BAR (TYPICAL)
5. INSTALL NEW FULL-SIZE BACK PANEL FOR MOUNTING EQUIPMENT.
6. LOOP THE NEW LIGHTING CIRCUITS WITHIN EACH JUNCTION BOX, SLACK WIRE EQUAL TO ONE COMPLETE LOOP FOR FUTURE USE. NEATLY TRAIN AND LACE BRANCH CIRCUIT BUNDLES TOGETHER WITHIN THE BOX SECURED TO THE BACK PANEL WITH A SEPARATE BUNDLE FOR EACH BRANCH CIRCUIT.
7. ALL CABLES, SPLICES, TERMINATIONS, ETC. SHALL BE RATED 600 VOLTS, WATERPROOF METHOD.
8. BOND ALL BRANCH CIRCUIT GROUND WIRES TO GROUND BAR WITHIN EACH BOX (TYPICAL).
9. BOND LIGHT POLE GROUND TO GROUND BAR WITHIN EACH BOX (TYPICAL).
10. ALL CONDUCTORS SHALL BE CONTINUOUS FROM ORIGIN TO EQUIPMENT TERMINATION WITHOUT SPLICES. WHERE LIGHT FIXTURE TAPS ARE REQUIRED, TAPS SHALL BE MADE USING A SEALED, INSULATED PRESSURE CONNECTOR PROVIDING BOTH INSULATION AND JACKET EQUAL TO THE CABLE. CONNECTORS SHALL BE 600V RATED, 150 DEGREE C TEMPERATURE RATED, AND UL LISTED.

INTERIOR JUNCTION BOX VIEW

SCALE: NONE



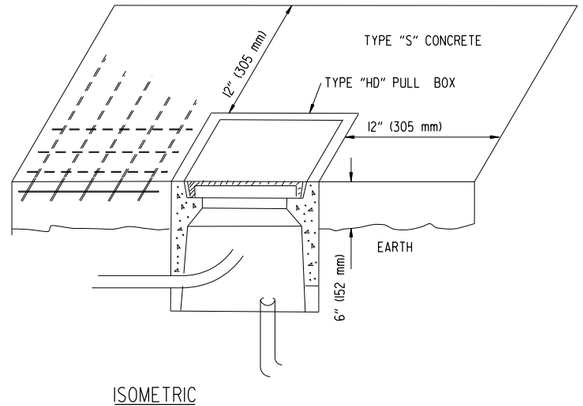


KEYED NOTES:

1. INSTALL NEW EXPANSION JOINT FITTING COUPLING FOR 1 1/2" GRSC FLUSH WITH PARAPET WALL. PAINT COUPLING WITH PVC COATING FOR CORROSION PROTECTION PRIOR TO CONCRETE WORK, INSTALL AT ALL EXPANSION JOINTS.
2. INSTALL NEW 1 1/2" GRSC RECESSED 3-1/2" IN EXPANSION COUPLING. EXPANSION COUPLING SHALL ALLOW FOR 4" OF CONDUIT MOVEMENT, PROVIDE O-Z/GEDNEY TYPE AX OR APPROVED EQUAL. PAINT ALL EXPOSED CONDUIT WITH PVC COATING AT EXPOSED AREAS AND 12" INTO PARAPET WALL FOR CORROSION PROTECTION PRIOR TO CONCRETE WORK.
3. INSTALL NEW 1 1/2" GRSC AND SECURE TO EXPANSION COUPLING. PAINT WITH PVC COATING 12" INTO PARAPET WALL FOR CORROSION PROTECTION PRIOR TO CONCRETE WORK.
4. INSTALL NEW BUSHING INSULATOR (TYPICAL).
5. INSTALL NEW DEDICATED #4/0 AWG COPPER GROUND WIRE, BOND TO ALL POLES AND JUNCTION BOXES.
6. INSTALL SLACK IN GROUND WIRE, COAT WITH PVC COATING AT EXPOSED AREA AND 12" INTO PARAPET WALL BOTH SIDES.
7. INSTALL NEW GROUNDING AND BONDING JUMPERS WITH SLACK ON EACH EXPANSION JOINT FITTING. PAINT WITH PVC COATING.
8. REFER TO BRIDGE DRAWINGS FOR EXPANSION JOINT LOCATIONS AND SIZES.

EXPANSION JOINT COUPLING DETAIL (TYPICAL)

SCALE: NONE



ISOMETRIC

CONCRETE PULL BOX (TYPE SPECIAL HD) DETAIL

SCALE: NONE

PULLBOX NOTES:

1. ALL TYPE HD PULL BOXES ARE INSTALLED WITH AN APRON OF CONCRETE 12" (305 MM) WIDE AND 6" (152 MM) IN DEPTH. ALL PAYMENT SHALL BE INCLUDED IN THE PRICE OF THE TYPE HD PULL BOX. PULL BOX SHALL BE INSTALLED FLUSH TO SURROUNDING GRADE UNLESS OTHERWISE INSTRUCTED BY THE ENGINEER. THE CONCRETE SHALL BE CLASS "S." THREE #6 REINFORCING BARS IN THE APRON ON ALL SIDES OF THE PULL BOX ARE REQUIRED IN CONCRETE.
2. UL LISTED PULLBOX AND EXTRA HEAVY-DUTY COVER SHALL BE DESIGNED FOR A TEST LOAD OF 33,750 LBS AND A DESIGN LOAD OF 22,500 LBS.
3. PULLBOX INTERIOR DIMENSIONS SHALL BE 18"L x 24"W x 18"D (OPEN BOTTOM).
4. PROVIDE MINIMUM 3' SLACK CABLE LOOP FOR EACH CABLE.
5. COLOR CODE, TAG AND IDENTIFY ALL CABLES IN UL LISTED PULLBOX.
6. EXACT LOCATION OF EACH UL LISTED PULLBOX SHALL BE APPROVED BY CONWAY CORPORATION AND ENGINEER PRIOR TO INSTALLATION.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.16153
NICHOLAS A. HOLLAND

Digitally Signed 05/19/2015

BRIDGE ENGINEER

SHEET 2 OF 2
ELECTRICAL DETAILS

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: NAH DATE: FEB. 2015 FILENAME: B080517_LP4.dgn
CHECKED BY: ECF DATE: FEB. 2015 SCALE: No Scale
DESIGNED BY: NAH DATE: FEB. 2015

BRIDGE NO. 07345 DRAWING NO. 57093

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WORKSPACE: AHTD Bridge
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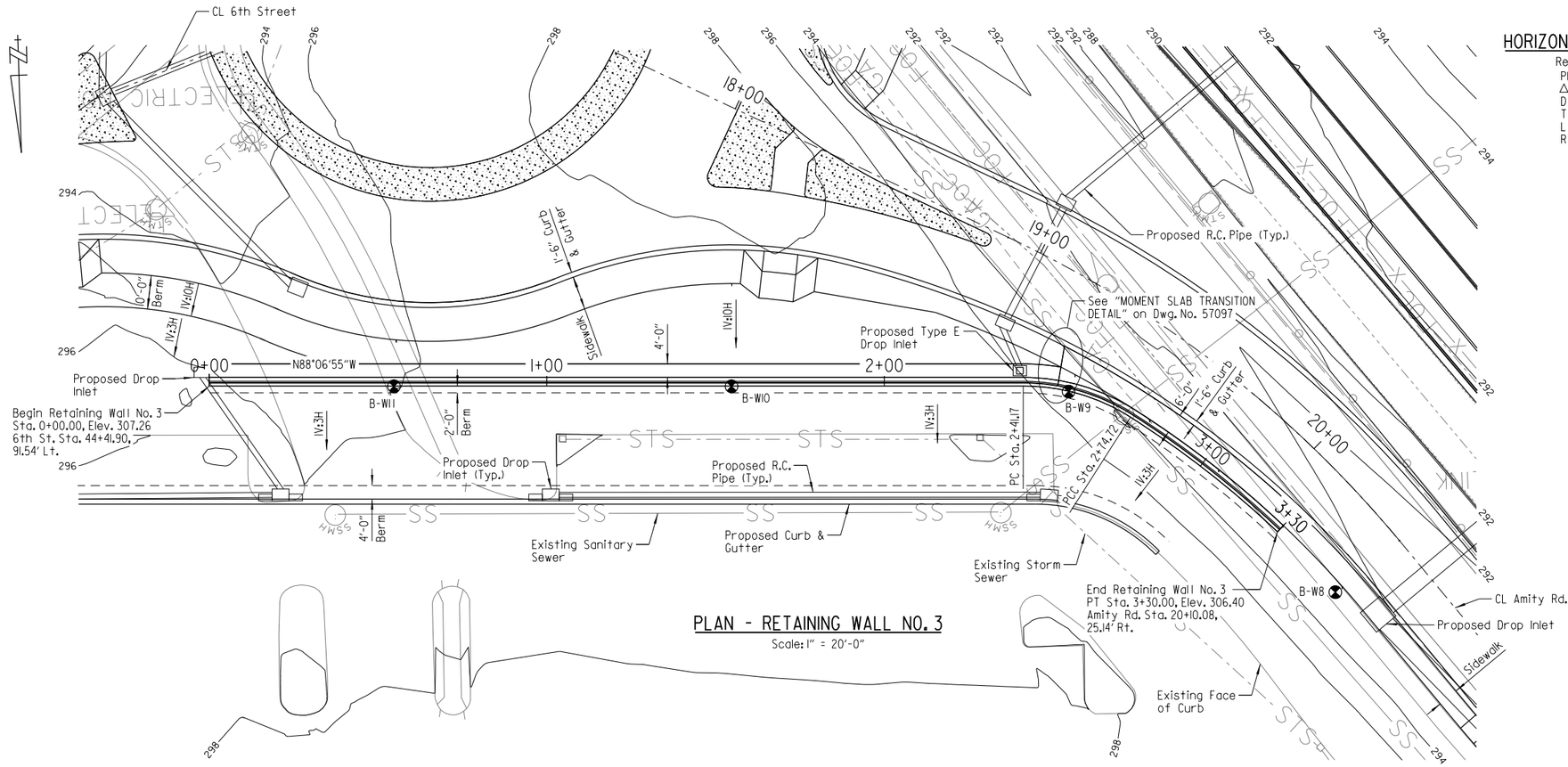
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080517	95	182
(1) 07345		RETAINING WALLS		57094



PLAN - RETAINING WALL NO. 3

Scale: 1" = 20'-0"

HORIZONTAL CURVE 1 DATA

Retaining Wall No. 3
PI = 2+58.41
Δ = 32°30'40" Rt.
D = 96°54'22"
T = 17.24'
L = 33.55'
R = 59.13'

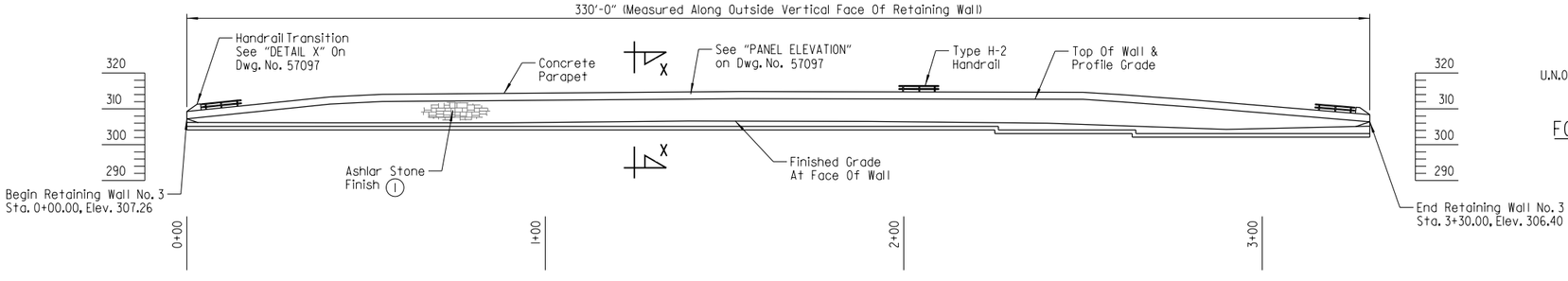
HORIZONTAL CURVE 2 DATA

Retaining Wall No. 3
PI = 3+02.44
Δ = 10°55'28" Rt.
D = 19°45'36"
T = 27.73'
L = 55.28'
R = 289.96'

TABLE OF RETAINING WALL NO. 3 ELEVATIONS

Station	Top Of Wall Elevation	Finished Grade Elevation
0+00.00	307.26	306.21
0+10.00	308.29	306.19
0+30.00	310.35	306.16
0+50.00	311.86	306.14
0+70.00	312.21	306.14
0+90.00	312.37	306.14
1+10.00	312.52	306.34
1+30.00	312.68	306.54
1+50.00	312.84	306.62
1+70.00	312.84	306.58
1+90.00	312.79	306.54
2+10.00	312.75	306.32
2+30.00	312.70	306.10
2+50.00	312.66	305.65
2+70.00	311.28	304.96
2+90.00	309.73	304.27
3+10.00	308.06	304.72
3+30.00	306.40	305.17

NOTE:
Stations shown are along outside vertical face of Reinforced Concrete Retaining Wall.



ELEVATION - RETAINING WALL NO. 3

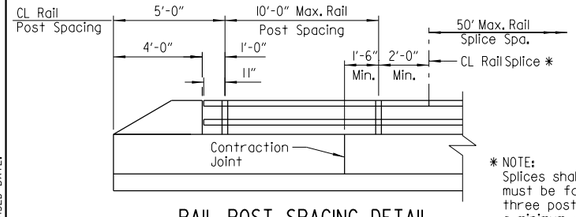
(Looking At Front Face Of Wall)
Scale: 1" = 20'-0"

(1) For details of architectural finish, see "SECTION X-X" on Dwg. No. 57098.

LEGEND

U.N.O. = Unless Noted Otherwise

FOR R/W DATA, SEE ROADWAY PLANS



RAIL POST SPACING DETAIL

Scale: NTS

* NOTE:
Splices shall be at 50' max. spacing. Rail sections must be fabricated to attach to at least three posts. CL splices shall be located at a minimum of 2'-0" from CL Post. See "SPLICE DETAIL" on Dwg. No. 57097.

NOTES:
For "SECTION X-X", see Dwg. No. 57098.

Stationing shown is along outside vertical face of Reinforced Concrete Retaining Wall U.N.O.

Offset dimensions are measured from CL Amity Rd. or CL 6th St. to outside vertical face of Retaining Wall.

Elevations shown are at top of Reinforced Concrete Retaining Wall.

Underdrain outlet shall penetrate front face of Retaining Wall.

For details of Reinforced Concrete Retaining Wall, see Std. Dwg. SI-2.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 8017
JOHN H. RUDDELL

Digitally Signed 05/19/2015

BRIDGE ENGINEER

SHEET 1 OF 5
DETAILS OF RETAINING WALLS
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: NOV. 2014 FILENAME: B080517_W1.dgn
CHECKED BY: DRG DATE: MAR. 2015 SCALE: As Shown
DESIGNED BY: SRY DATE: NOV. 2015

BRIDGE NO. 07345 DRAWING NO. 57094

DRGOAD 5/19/2015 8:00:39 PM
WORKSPACE: AHTD Bridge
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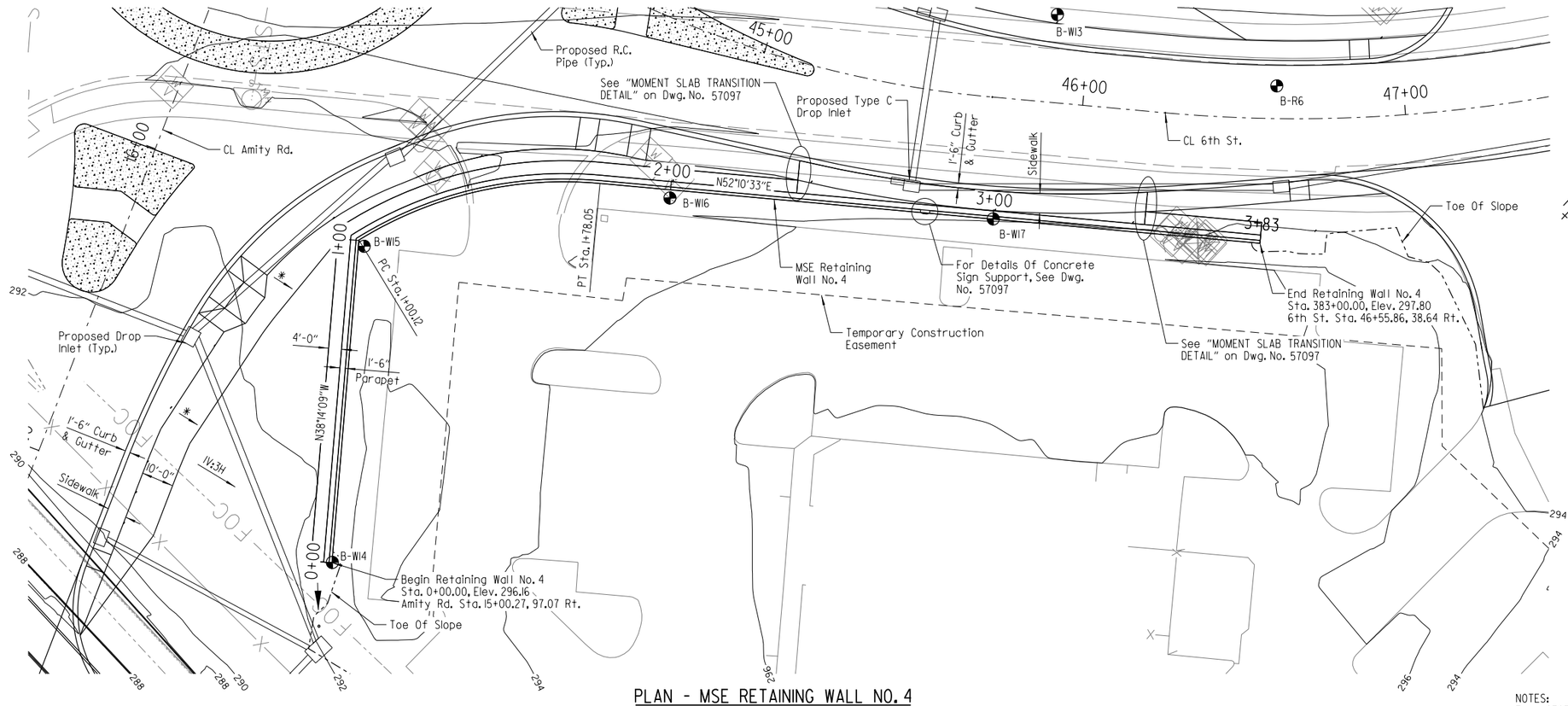
REVISED DATE:

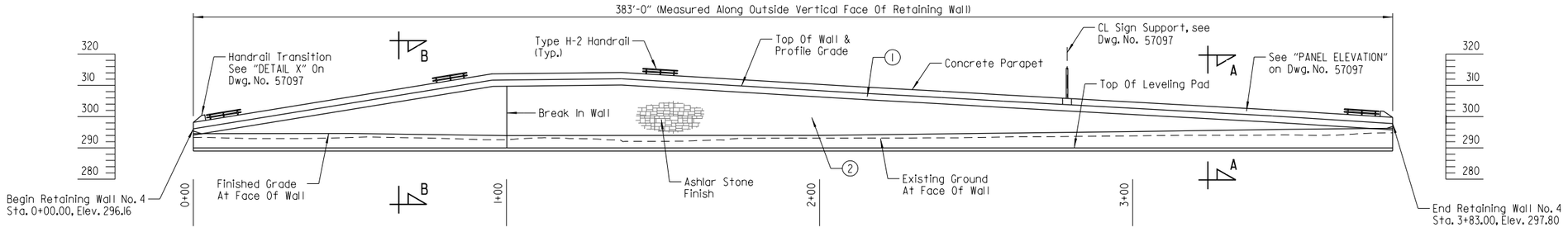
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080517	96	182
(1) 07345		RETAINING WALLS		57095



PLAN - MSE RETAINING WALL NO. 4

Scale: 1" = 20'-0"



ELEVATION - MSE RETAINING WALL NO. 4

(Looking At Front Face Of Wall)
Scale: 1" = 20'-0"

HORIZONTAL CURVE 1 DATA

Retaining Wall No. 4
PI = 1+40.51
Δ = 27°10'19" Rt.
D = 47°41'48"
T = 40.39'
L = 77.93'
R = 120.13'

LEGEND

U.N.O. = Unless Noted Otherwise

FOR R/W DATA, SEE ROADWAY PLANS

NOTES:
For "SECTION A-A" & "SECTION B-B", see Dwg. No. 57096 .

Stationing shown is along outside vertical face of MSE Retaining Wall U.N.O.

Offset dimensions are measured from CL 6th St. or CL Amity Rd. to outside vertical face of MSE Retaining Wall.

Elevations shown are at top of MSE Wall coping.

Underdrain outlet shall penetrate front face of MSE Retaining Wall.

For "GENERAL NOTES", see Dwg. No. 57096

For "TABLE OF MSE RETAINING WALL NO. 4 ELEVATIONS", see Dwg. No. 57096.

For "RAIL POST SPACING DETAIL", see Dwg. No. 57094 .

(1) Class 3 Textured Coating Finish
(Color = Brown, Color Chip No. 33522)

(2) Ashlar Stone Pattern &
Class 3 Textured Coating Finish
(Color = Brown, Color Chip No. 30219)

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 8017
JOHN H. RUDDELL

Digitally Signed 05/19/2015

BRIDGE ENGINEER

SHEET 2 OF 5
DETAILS OF RETAINING WALLS

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

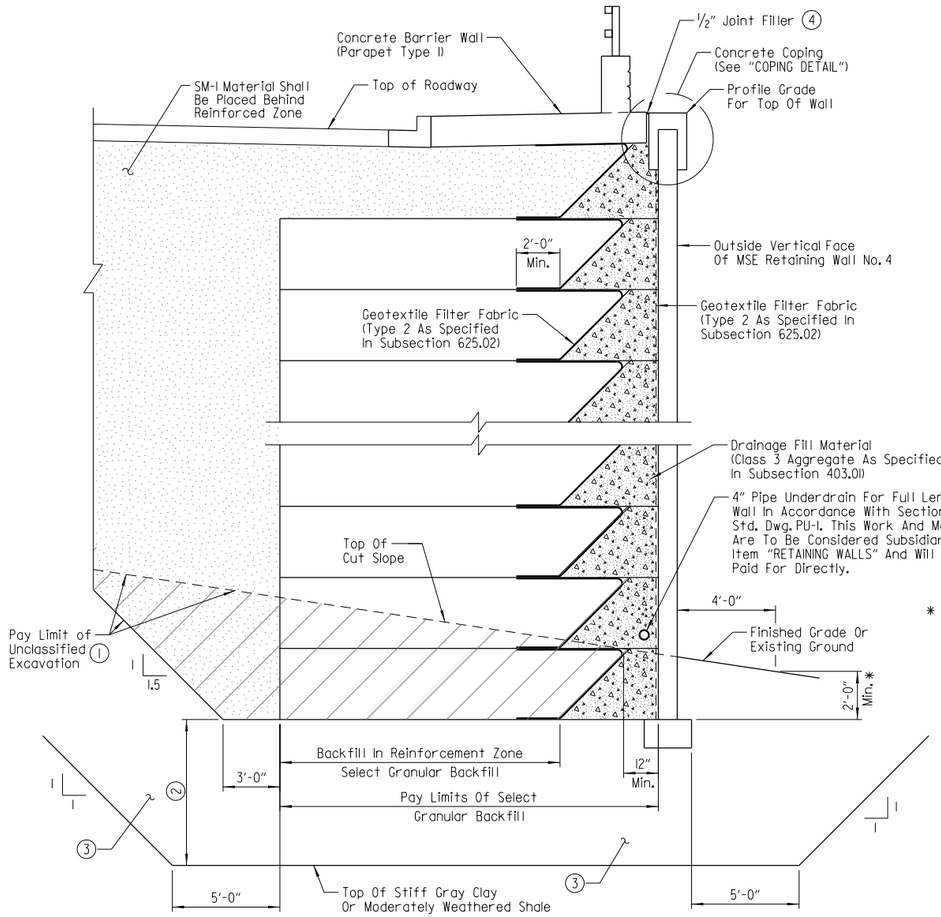
LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: NOV. 2014 FILENAME: B080517_W2.dgn
CHECKED BY: DRG DATE: MAR. 2015 SCALE: As Shown
DESIGNED BY: SRY DATE: NOV. 2015

BRIDGE NO. 07345 DRAWING NO. 57095

DRGOAD 5/19/2015 7:28:00 PM
WORKSPACE: AHTD Bridge
L:\20I2\20I7590 - Contrell\Field Access\Drawings\6TH_ST\B080517_W2.dgn
REVISED DATE:

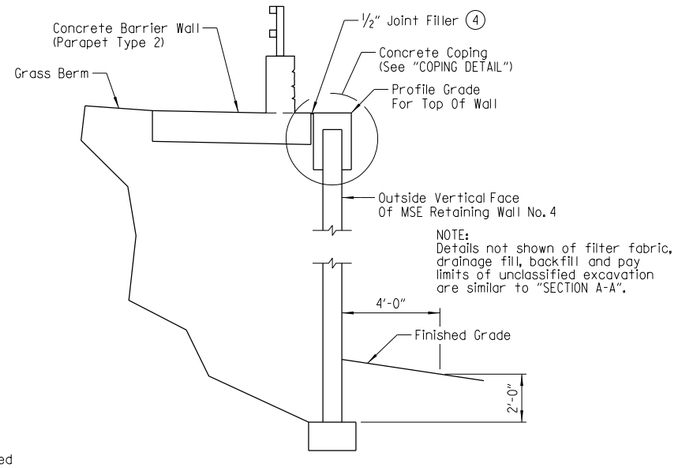
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080517	97	182
				(1) 07345		RETAINING WALLS		57096



SECTION A-A

(Backfill Method A)
Scale: NTS

NOTE:
For details of Backfill Method B,
see "SECTION A-A" on Dwg. No. 57065



SECTION B-B

Scale: NTS

* Unless noted otherwise on the MSE wall elevation view.

(1) Excavation required for reinforcing zone, leveling pad and placement of SM-1 material will be paid for under the pay item "UNCLASSIFIED EXCAVATION". See SP "RETAINING WALLS".

NOTE:
All backfill and drainage fill material within the reinforcement zone shall be included in the price bid for "SELECT GRANULAR BACKFILL".
Select material required behind reinforced zone shall be included in the price bid for "EMBANKMENT CONSTRUCTION". See SP "RETAINING WALLS".

(2) Depth of undercut varies from 0' to 3' as directed by the Engineer

(3) For MSE Wall No. 4, SM-1 material shall be placed as undercut backfill. Excavation and backfill material for the undercut area shall be paid for under the pay item "MSE WALL UNDERCUT AND BACKFILL". See SP "RETAINING WALLS" for details.

(4) ½" Joint Filler (AASHTO M153, Type 1 Per Subsection 501.02(h)(1) With ½" x 1" Type 3 or 4 Joint Sealer Per Subsection 501.02(h)(2))

TABLE OF MSE RETAINING WALL NO. 4 ELEVATIONS

Station	Top Of Wall Elevation	Existing Ground Elevation
0+00.00	296.16	293.36
0+20.00	299.42	293.00
0+40.00	302.67	293.09
0+60.00	305.93	293.45
0+80.00	309.19	293.04
0+95.46	311.71	292.65
1+00.00	311.75	292.65
1+20.00	311.95	293.03
1+36.75	312.12	292.53
1+40.00	311.92	292.14
1+60.00	310.72	292.33
1+80.00	309.51	293.10
2+00.00	308.30	293.13
2+20.00	307.15	293.19
2+40.00	306.08	293.26
2+60.00	304.89	293.52
2+80.00	303.79	293.67
3+00.00	302.68	293.87
3+20.00	301.58	294.10
3+40.00	300.47	294.11
3+60.00	299.24	294.08
3+80.00	297.98	294.82
3+83.00	297.79	294.88

NOTE:
Stations shown are along outside vertical face of MSE Wall.

GENERAL NOTES:

DESIGN SPECIFICATIONS: AASHTO LRFD Bridge Design Specifications 6th Edition (2012) with Current Interim Revisions

SEISMIC PERFORMANCE ZONE: 1 SDI = 0.093 SITE CLASS: B

4" pipe underdrain shall maintain a minimum slope of ⅛" per foot toward nearest outlet.

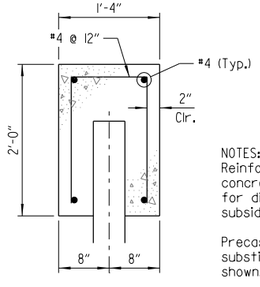
Elevations are approximate. Wall dimensions may vary depending on wall design selected.

See SP "RETAINING WALLS" for additional information.

Boring logs, including laboratory results, may be obtained from Programs and Contracts Division.

Joint filler, joint sealer, polystyrene foam board and rodent screen will not be paid for directly but will be considered subsidiary to SP "RETAINING WALLS".

A Class 3 Textured Coating Finish shall be applied to surfaces as specified in SP "TEXTURED COATING FINISH" and in accordance with Subsection 802.19.

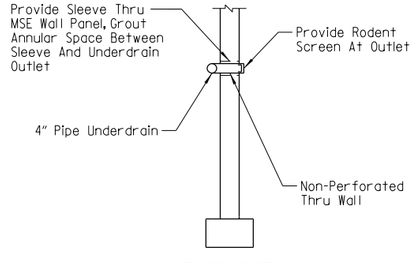


COPING DETAIL

Scale: NTS

NOTES:
Reinforcing steel and concrete for concrete coping shall not be paid for directly but will be considered subsidiary to the item "RETAINING WALLS".

Precast concrete coping may be substituted for cast-in-place coping shown.



OUTLET DETAIL

Scale: NTS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8017
JOHN H. RUDDELL

Digitally Signed 05/19/2015

BRIDGE ENGINEER

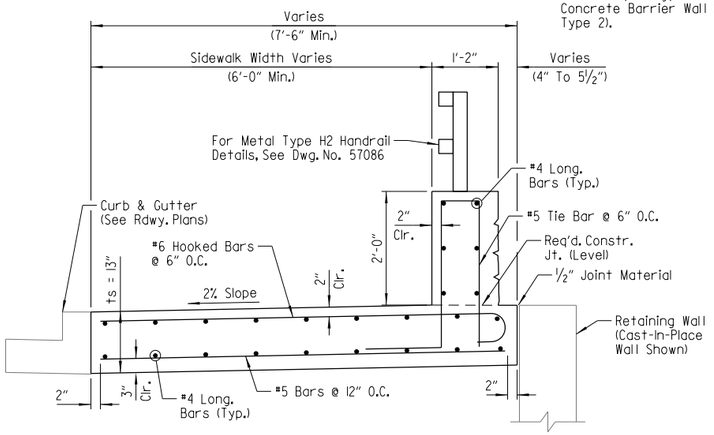
SHEET 3 OF 5
DETAILS OF RETAINING WALLS
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: DRG DATE: MAR. 2015 FILENAME: B080517_W3.dgn
CHECKED BY: SRY DATE: MAR. 2015 SCALE: As Shown
DESIGNED BY: DRG DATE: MAR. 2015
BRIDGE NO. 07345 DRAWING NO. 57096

DRGOAD 5/19/2015 7:28:00 PM
WORKSPACE: AHTD Bridge
L:\202\2017590 - Cantrell Field Access\Drawings\6TH_ST\B080517_W3.dgn
REVISED DATE:

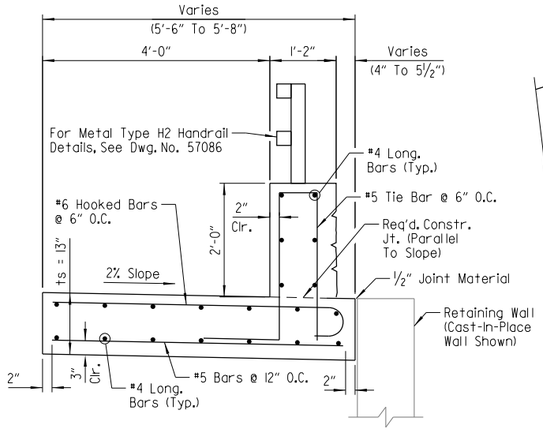
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080517	98	182
				(1) 07345		RETAINING WALLS		57097

Note:
Type H2 Metal Handrail shall be included in the linear foot price bid for Concrete Barrier Wall (Parapet Type 1) or Concrete Barrier Wall (Parapet Type 2).



CONCRETE BARRIER WALL (PARAPET TYPE 1)

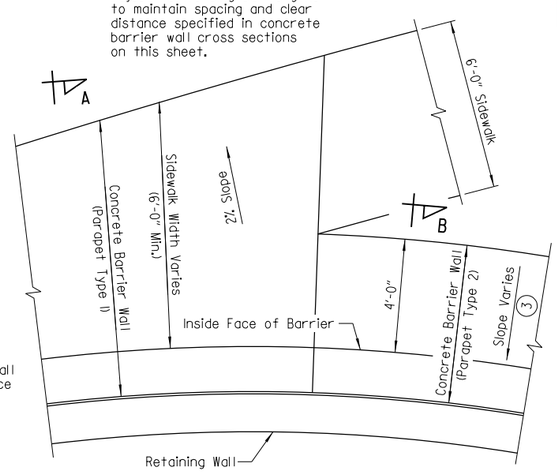
Scale: ¾" = 1'-0"



CONCRETE BARRIER WALL (PARAPET TYPE 2)

Scale: ¾" = 1'-0"

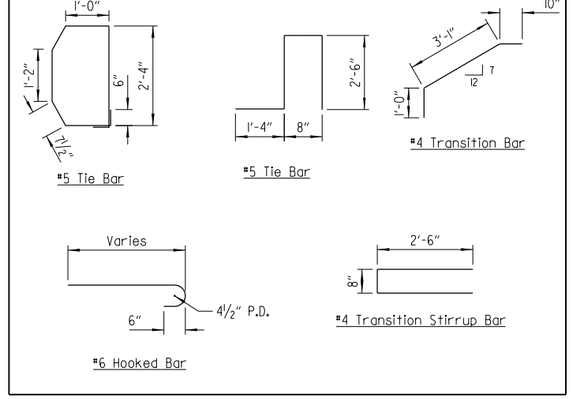
NOTE:
Adjust reinforcing bar lengths to maintain spacing and clear distance specified in concrete barrier wall cross sections on this sheet.



MOMENT SLAB TRANSITION DETAIL

Scale: NTS

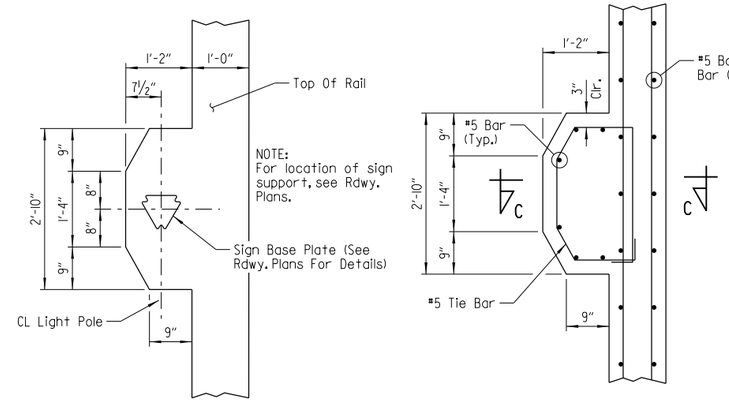
BAR BENDING DETAILS



Note:
Dimensions of bars are out-to-out.

(3) Transition cross slope of Concrete Barrier Wall (Parapet Type 2) footing to match slope of adjacent Concrete Barrier Wall (Parapet Type 1).

Note:
All longitudinal bars shall have a minimum lap splice length of 1'-9" (#4 bars) and 2'-2" (#5 bars).

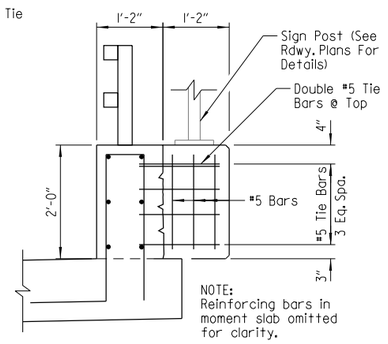


PLAN - CONCRETE SIGN SUPPORT

Scale: ¾" = 1'-0"

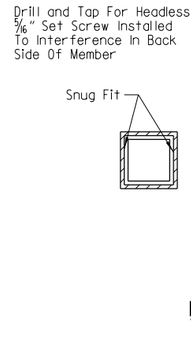
PLAN - CONCRETE SIGN SUPPORT

(Reinforcing Details)
Scale: ¾" = 1'-0"

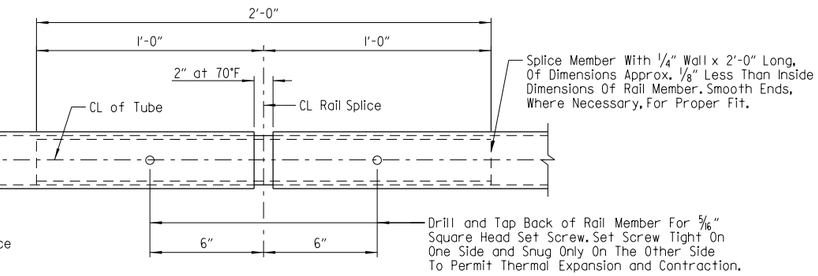


SECTION C-C

Scale: ¾" = 1'-0"



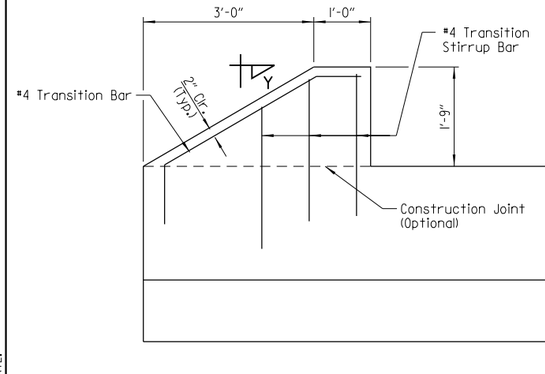
ALTERNATE INSTALLATION



SPLICE DETAIL

Scale: 3" = 1'-0"

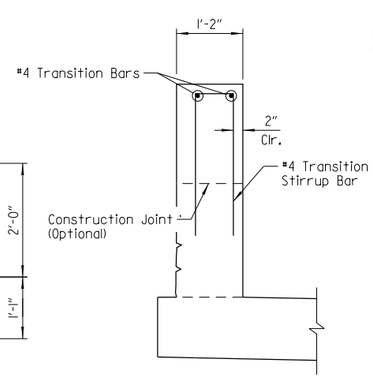
Note:
For additional structural and material details of Type H2 Metal Handrail, see Dwg. No. 57086.



Y

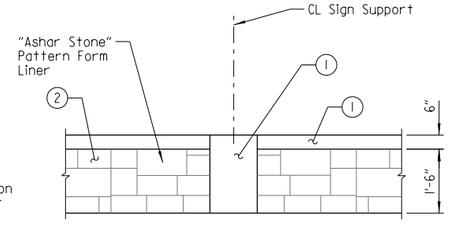
DETAIL X

Scale: ¾" = 1'-0"



SECTION Y-Y

Scale: ¾" = 1'-0"

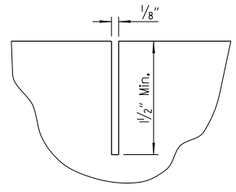


(1) Class 3 Textured Coating Finish (Color = Brown, Color Chip No. 33522)

(2) Ashlar Stone Pattern & Class 3 Textured Coating Finish (Color = Brown, Color Chip No. 30219)

PANEL ELEVATION

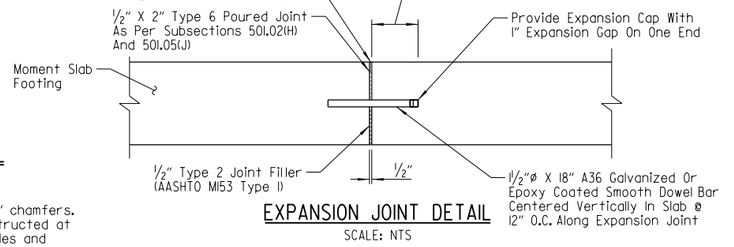
(Showing Outside Face Of Barrier)
Scale: NTS



CONTRACTION JOINT DETAIL

Scale: NTS

Notes for barrier & moment slab
1. All exposed edges shall have ¾" chamfers.
2. Contraction joints shall be constructed at 15'-0" max. spacing in top and sides and shall be formed in fresh concrete.
3. All reinforcing steel Grade 60
4. All concrete Class S(AE)



Note:
Where total length of moment slab exceeds 200'-0", provide expansion joints at spacing not to exceed 200'-0".

EXPANSION JOINT DETAIL

SCALE: NTS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8017
JOHN H. RUDDELL

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BRIDGE ENGINEER

SHEET 4 OF 5
DETAILS OF RETAINING WALLS

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: DRG DATE: MAR. 2015 FILENAME: B080517_W4.dgn
CHECKED BY: SRY DATE: MAR. 2015 SCALE: As Shown
DESIGNED BY: DRG DATE: MAR. 2015

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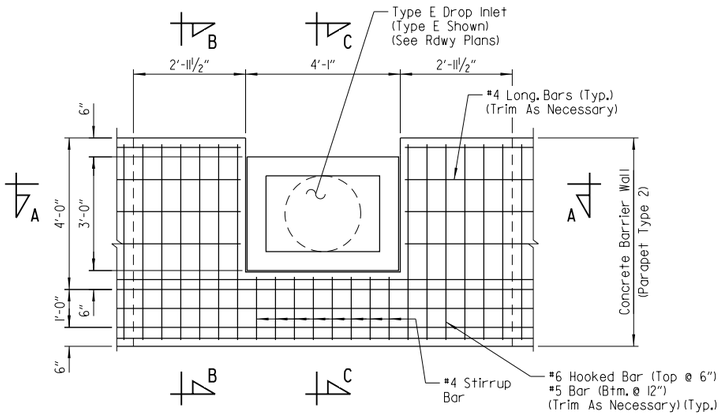
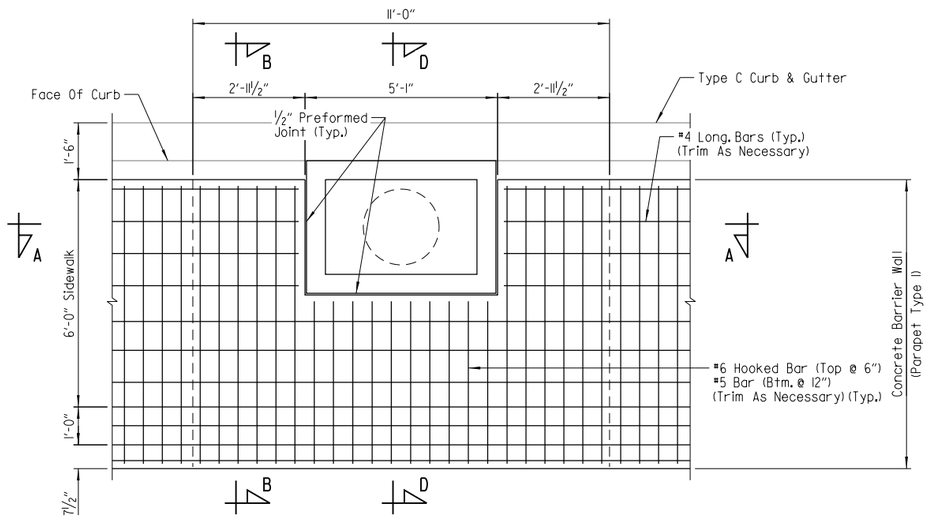
WORKSPACE: AHTD Bridge
L:\2012\12017590 - Conrell Field Access\Drawings\6TH_ST\B080517_W4.dgn
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080517	99	182
				(1) 07345		RETAINING WALLS		57098



PLAN - MOMENT SLAB AT TYPE E DROP INLET

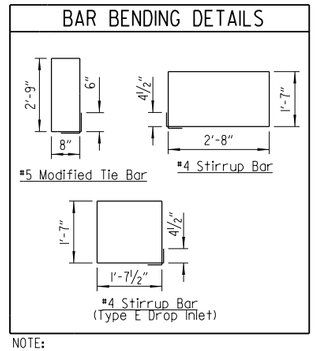
Scale: ½" = 1'-0"



PLAN - MOMENT SLAB AT TYPE C DROP INLET

Scale: ½" = 1'-0"

BAR BENDING DETAILS

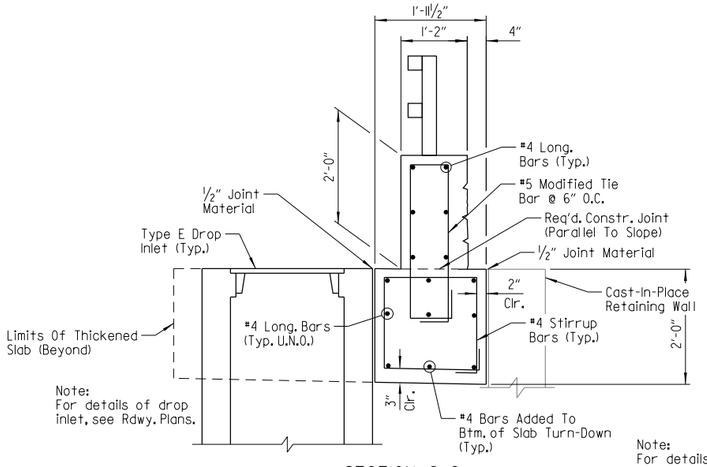


NOTE:
Dimensions of bars are out-to-out.

(1) Class 3 Textured Coating Finish (Color = Brown, Color Chip No. 33522)

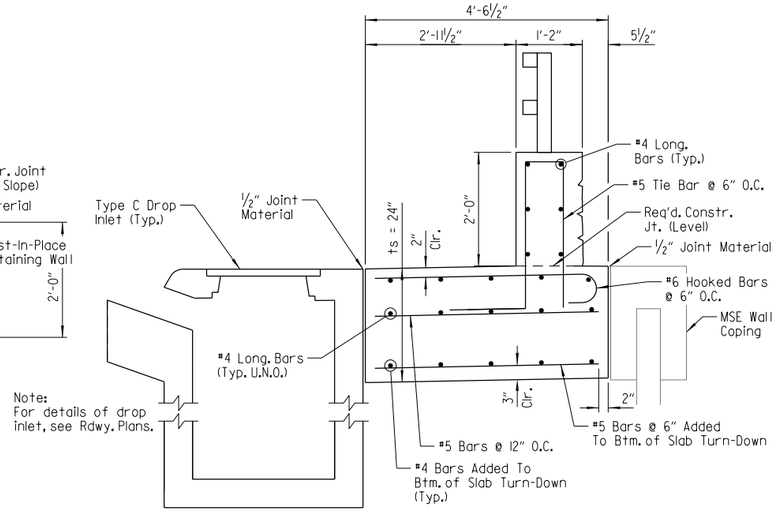
(2) Ashlar Stone Pattern & Class 3 Textured Coating Finish (Color = Brown, Color Chip No. 30219)

(3) 1'-0" as shown in Std. Dwg. SI-2 plus 2" for architectural finish



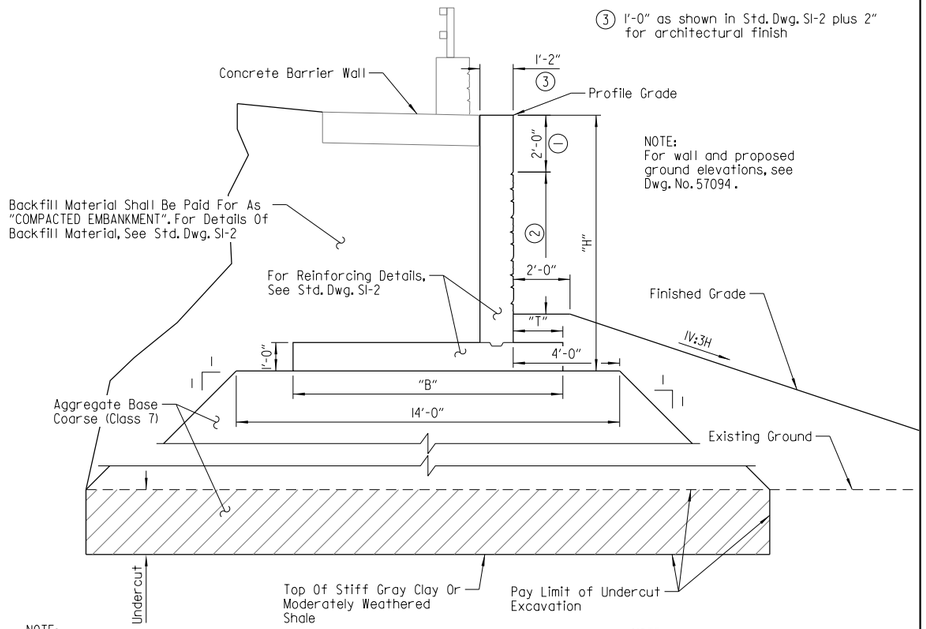
SECTION C-C

Scale: NTS



SECTION D-D

Scale: NTS



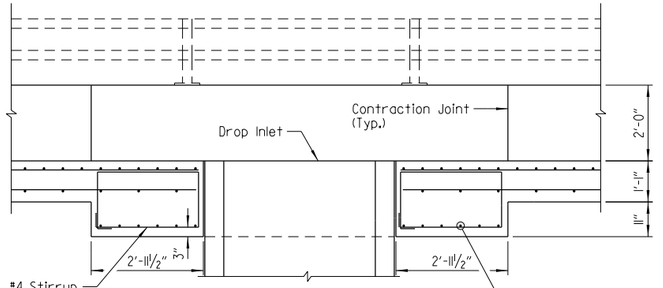
NOTE:
For wall and proposed ground elevations, see Dwg. No. 57094.

NOTE:
For reinforced concrete retaining wall details, see Std. Dwg. SI-2.

SECTION X-X

Scale: NTS

NOTE:
For variables "B", "H" & "T", see "TABLE OF RETAINING WALL VARIABLES (SLOPED BACKFILL) (IV:2H MAX.)" on Std. Dwg. SI-2.



SECTION B-B

Scale: NTS

SECTION A-A

Scale: ½" = 1'-0"

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 8017
JOHN H. RUDDELL

Digitally Signed 05/19/2015

BRIDGE ENGINEER

SHEET 5 OF 5
DETAILS OF RETAINING WALLS

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: DRG DATE: MAR. 2015 FILENAME: B080517_W5.dgn
CHECKED BY: SRY DATE: MAR. 2015 SCALE: As Shown
DESIGNED BY: DRG DATE: MAR. 2015

BRIDGE NO. 07345 DRAWING NO. 57098

DRGOAD 5/19/2015 7:28:02 PM
WORKSPACE: AHTD Bridge
L:\2012\2017590 - Conf\Field Access\Drawings\6TH_ST\B080517_W5.dgn
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080517	100	182
				(1) 07345		BORING LOGS		57099

14-053

Grubbs, Hoskyn, Barton & Wyatt, Inc. Consulting Engineers

LOG OF BORING NO. W8

6th Street over I-40
Conway, Arkansas

TYPE: Auger LOCATION: Wall No. 3 - Sta 7+00

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 297±				
			Firm tan silty clay w/shale fragments (fill)	9			
			Soft tan silty clay, damp	4			86
5			- firm with shale fragments below 4.5 ft	9			
			Low hardness tan and gray weathered shale w/ferrous stains - moderately hard, gray and dark gray below 6 ft	50/6"			
				30/0"			
10			- auger refusal at 11 ft in shale				
			NOTE: Water at 8.2 ft at 15 minutes.				
15							
20							
25							

COMPLETION DEPTH: 11.0 ft DEPTH TO WATER
DATE: 12-8-14 IN BORING: Dry DATE: 12/8/2014

LGRNEW 14-053.GPJ 5-31-15

PLATE 14

14-053

Grubbs, Hoskyn, Barton & Wyatt, Inc. Consulting Engineers

LOG OF BORING NO. W9

6th Street over I-40
Conway, Arkansas

TYPE: Auger LOCATION: Wall No. 3 - Sta 6+00

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 297±				
			Brown clayey silt w/organics (fill)				
			Firm gray and tan silty clay w/shale fragments (fill)	8			
			Stiff tan silty clay w/occasional ferrous nodules	12			72
5			- soft with shale fragments, damp below 4 ft	4			
			Low hardness gray and tan weathered shale w/ferrous stains - water at 7.3 ft	40			
			- moderately hard, gray to dark gray below 8.5 ft	50/4"			
10							
				30/0"			
			- auger refusal in shale at 14.5 ft				
			NOTE: Water at 4.3 ft at 2.5 hours.				
15							
20							
25							

COMPLETION DEPTH: 14.5 ft DEPTH TO WATER
DATE: 12-8-14 IN BORING: 7.3 ft DATE: 12/8/2014

LGRNEW 14-053.GPJ 5-31-15

PLATE 15

14-053

Grubbs, Hoskyn, Barton & Wyatt, Inc. Consulting Engineers

LOG OF BORING NO. W10

6th Street over I-40
Conway, Arkansas

TYPE: Auger LOCATION: Wall No. 3 - Sta 5+00

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 297±				
			Firm to stiff reddish tan and brown silty clay w/shale fragments and trace organcis (fill)	10			78
			- firm below 2 ft	8			
5			- stiff below 4 ft	20			
			Firm tan silty clay	9			79
			Low hardness dark gray and tan weathered shale	50			
10							
15			- moderately hard, less weathered below 14 ft	50/5"			
			Moderately hard to hard dark gray shale	25/0"			
20			NOTE: Dry at completion.				
25							

COMPLETION DEPTH: 20.0 ft DEPTH TO WATER
DATE: 12-3-14 IN BORING: Dry DATE: 12/3/2014

LGRNEW 14-053.GPJ 5-31-15

PLATE 16

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8017
JOHN H. RUDDELL

Digitally Signed 05/19/2015

BRIDGE ENGINEER

SHEET 1 OF 4
BORING LOG DETAILS
RETAINING WALL NOS. 3 & 4

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: MAR. 2015 FILENAME: B080517_BL4.dgn
CHECKED BY: DRG DATE: MAR. 2015 SCALE: As Shown
DESIGNED BY: - DATE: -

BRIDGE NO. 07345 DRAWING NO. 57099

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L:\202\2017590 - Cantrell Field Access\Drawings\6TH_ST\B080517_BL4.dgn
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080517	101	182
				1	07345	BORING LOGS		57100

14-053

Grubbs, Hoskyn, Barton & Wyatt, Inc. Consulting Engineers

LOG OF BORING NO. W11

6th Street over I-40
Conway, Arkansas

TYPE: Auger LOCATION: Wall No. 3 - Sta 4+00

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 296±				
			Soft reddish tan and brown silty clay w/shale fragments and organics (fill)	6			52
			– firm below 2 ft	7			
5			Stiff gray, reddish tan and brown silty clay w/some sandstone fragments	14			79
			Stiff gray and tan silty clay w/weathered shale seams	21			
10			Moderately hard gray and tan weathered shale	50/8"			
15			Moderately hard to hard tan and dark gray shale	25/0"			
			– water at 18 ft	25/0"			
20			NOTE: Water at 9.6 ft at completion.				
25							

COMPLETION DEPTH: 20.0 ft DATE: 12-3-14
DEPTH TO WATER IN BORING: 18 ft
DATE: 12/3/2014

LGBWW 14-053.GPJ 5-31-15

PLATE 17

14-053

Grubbs, Hoskyn, Barton & Wyatt, Inc. Consulting Engineers

LOG OF BORING NO. W12

6th Street over I-40
Conway, Arkansas

TYPE: Auger LOCATION: Wall No. 3 - Sta 3+00

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 296±				
			Stiff tan and reddish brown silty clay w/some shale fragments (fill) – with trace organics to 0.5 ft	11			78
			Low hardness gray and reddish tan highly weathered shale w/silty clay seams and layers	28			
5			Moderately hard gray and reddish tan weathered shale	50/10"			
				50/7"			
10				50/5"			
15			– moderately hard to hard less weathered, tan and dark gray below 12 ft	25/0"			
			Moderately hard to hard dark gray shale	25/0"			
20							
25							

COMPLETION DEPTH: 20.0 ft DATE: 11-24-14
DEPTH TO WATER IN BORING: Dry
DATE: 11/24/2014

LGBWW 14-053.GPJ 5-31-15

PLATE 18

14-053

Grubbs, Hoskyn, Barton & Wyatt, Inc. Consulting Engineers

LOG OF BORING NO. W13

6th Street over I-40
Conway, Arkansas

TYPE: Auger LOCATION: Wall No. 3 - Sta 2+00

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 293±				
			Soft brown and reddish tan silty clay w/shale fragments and trace organics (fill)	6			48
			Moderately hard tan weathered shale w/silty clay seams and ferrous stains	50			
5				50/4"			
			Moderately hard to hard dark gray shale	25/0"			
10				25/0"			
15				25/0"			
				25/0"			
20			NOTE: Dry at completion.				
25							

COMPLETION DEPTH: 20.0 ft DATE: 12-3-14
DEPTH TO WATER IN BORING: Dry
DATE: 12/3/2014

LGBWW 14-053.GPJ 5-31-15

PLATE 19

DRGOAD 5/19/2015 7:50:59 PM
WORKSPACE: AHTD Bridge
L:\2012\2017590 - Cantrell Field Access\Drawings\6TH_ST\B080517_BL5.dgn
REVISED DATE:

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8017
JOHN H. RUDDELL

Digitally Signed 05/19/2015

BRIDGE ENGINEER

SHEET 2 OF 4
BORING LOG DETAILS
RETAINING WALL NOS. 3 & 4
ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: MAR. 2015 FILENAME: B080517_BL5.dgn
CHECKED BY: DRG DATE: MAR. 2015 SCALE: As Shown
DESIGNED BY: - DATE: -

BRIDGE NO. 07345 DRAWING NO. 57100

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080517	102	182
				(1) 07345		BORING LOGS		57101

14-053

Grubbs, Hoskyn, Barton & Wyatt, Inc. Consulting Engineers

LOG OF BORING NO. W14

6th Street over I-40
Conway, Arkansas

TYPE: Auger LOCATION: Wall No. 4 – Sta 0+00

SURF. EL: 292±

DEPTH, FT	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT – WATER CONTENT – LIQUID LIMIT (10 20 30 40 50 60 70)	% – No. 200
	Stiff gray and reddish tan silty clay w/shale fragments (fill)	11			69
	Soft tan silty clay w/occasional ferrous nodules, damp	5			
5	– firm with shale fragments below 4.5 ft	7			85
	Low hardness dark gray and tan weathered shale	42			
	– water at 7.6 ft – moderately hard below 8 ft	50/6"			
10	Moderately hard dark gray shale				
		30/0"			
15		30/0"			
	– auger refusal in shale at 17.5 ft				
	NOTE: Water at 6.3 ft at 30 minutes.				
20					
25					

COMPLETION DEPTH: 17.5 ft
DATE: 12-5-14

DEPTH TO WATER IN BORING: 7.6 ft

DATE: 12/5/2014

LGBWEW 14-053.GPJ 3-31-15

PLATE 20

14-053

Grubbs, Hoskyn, Barton & Wyatt, Inc. Consulting Engineers

LOG OF BORING NO. W15

6th Street over I-40
Conway, Arkansas

TYPE: Auger LOCATION: Wall No. 4 – Sta 1+00

SURF. EL: 293±

DEPTH, FT	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT – WATER CONTENT – LIQUID LIMIT (10 20 30 40 50 60 70)	% – No. 200
	Stiff gray and reddish brown silty clay and some shale fragments (fill) – with trace organics to 1 ft	11			
	– water at 2.8 ft	18			31
5	Moderately hard brown, dark gray and tan weathered shale – with occasional silty clay pockets and seams to 6 ft – tan, dark gray and gray below 6 ft	50/10"			
		50/8"			
10		50/6"			
	Moderately hard to hard dark gray shale	25/0"			
15		25/0"			
	NOTE: Water at 3 ft at 2 hours after completion.				
20					
25					

COMPLETION DEPTH: 20.0 ft
DATE: 11-24-14

DEPTH TO WATER IN BORING: 2.8 ft

DATE: 11/24/2014

LGBWEW 14-053.GPJ 3-31-15

PLATE 21

DRGOAD 5/19/2015 7:51:04 PM
WORKSPACE: AHTD Bridge
L:\2012\12017590 - Cantrell Field Access\Drawings\6TH_ST\B080517_BL6.dgn
REVISED DATE:

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8017
JOHN H. RUDDELL

Digitally Signed 05/19/2015

BRIDGE ENGINEER

SHEET 3 OF 4
BORING LOG DETAILS
RETAINING WALL NOS. 3 & 4

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: MAR. 2015 FILENAME: B080517_BL6.dgn
CHECKED BY: DRG DATE: MAR. 2015 SCALE: As Shown
DESIGNED BY: - DATE: -

BRIDGE NO. 07345 DRAWING NO. 57101

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080517	103	182
				(1) 07345		BORING LOGS		57102

14-053

Grubbs, Hoskyn, Barton & Wyatt, Inc. Consulting Engineers

LOG OF BORING NO. W16

6th Street over I-40
Conway, Arkansas

TYPE: Auger LOCATION: Wall No. 4 – Sta 2+00

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4)	PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	– No. 200 %
			SURF. EL: 293±					
			Stiff to very stiff tan and reddish brown silty clay w/some shale fragments (fill) – with trace organics to 1 ft	37				
			Moderately hard tan, reddish tan and gray highly weathered shale w/occasional silty clay seams and layers	50/8"				
5				50/10"				
			Moderately hard tan and dark gray weathered shale	50/6"				
			– less weathered below 8 ft	50/8"				
10								
			Moderately hard to hard dark gray shale	50/6"				
15								
				50/5"				
20								
25								

COMPLETION DEPTH: 20.0 ft
DATE: 11-24-14
DEPTH TO WATER IN BORING: Dry
DATE: 11/24/2014

PLATE 22

14-053

Grubbs, Hoskyn, Barton & Wyatt, Inc. Consulting Engineers

LOG OF BORING NO. W17

6th Street over I-40
Conway, Arkansas

TYPE: Auger LOCATION: Wall No. 4 – Sta 3+00

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4)	PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	– No. 200 %
			SURF. EL: 293±					
			Very stiff gray, reddish tan and brown silty clay w/some shale fragments and occasional fine sand pockets (fill)	55				
			Low hardness gray, reddish tan and brown highly weathered shale w/silty clay seams and layers	40				67
5			Low hardness to moderately hard tan and gray weathered shale	50				
			– moderately hard below 6 ft	50/7"				
			Moderately hard dark gray shale	50/7"				
10								
			– hard below 12 ft – water at 12 ft – moderately hard to hard below 13 ft	25/0"				
15								
			– auger refusal at 16 ft					
20			NOTE: Water at 7.2 ft 1 hour after completion.					
25								

COMPLETION DEPTH: 16.0 ft
DATE: 11-24-14
DEPTH TO WATER IN BORING: 12 ft
DATE: 11/24/2014

PLATE 23

DRGOAD 5/19/2015 7:5:04 PM
WORKSPACE: AHTD Bridge
L:\2012\2017590 - Cantrell Field Access\Drawings\6TH_ST\B080517_BL7.dgn
REVISED DATE:

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No.8017
JOHN H. RUDDELL

Digitally Signed 05/19/2015

BRIDGE ENGINEER

SHEET 4 OF 4
BORING LOG DETAILS
RETAINING WALL NOS. 3 & 4

ROUTE SEC.

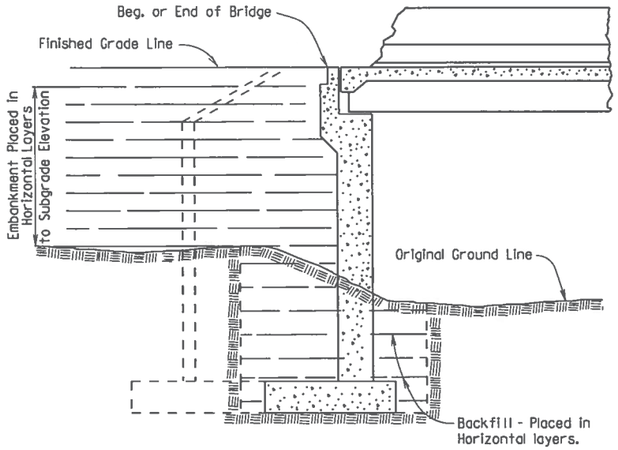
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: MAR. 2015 FILENAME: B080517_BL7.dgn
CHECKED BY: DRG DATE: MAR. 2015 SCALE: As Shown
DESIGNED BY: - DATE: -

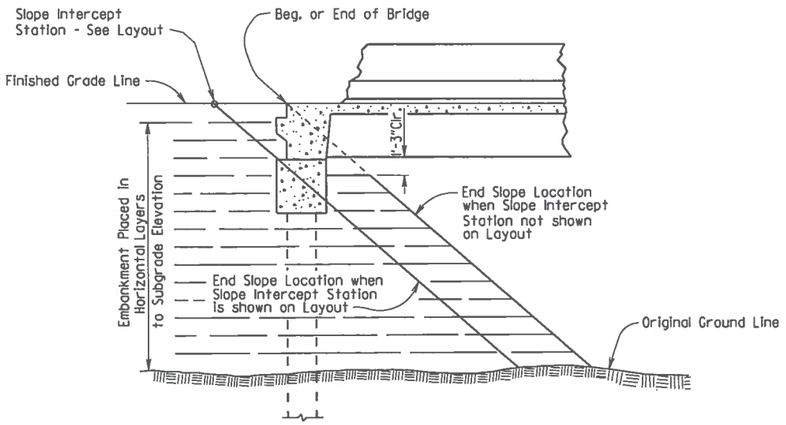
BRIDGE NO. 07345 DRAWING NO. 57102

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.			104	

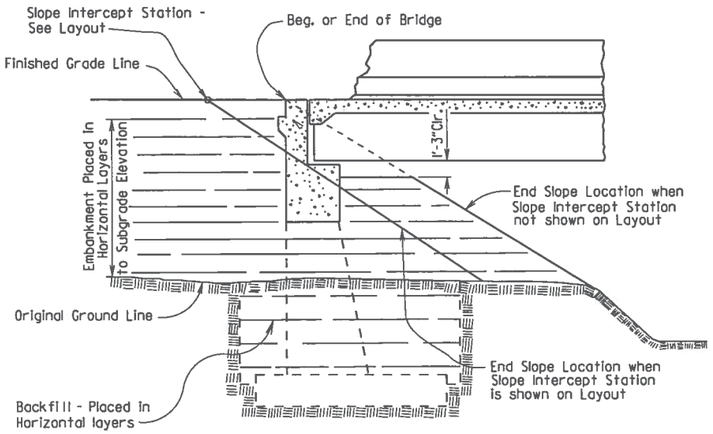
(1) EMBANKMENT & BACKFILL 55000



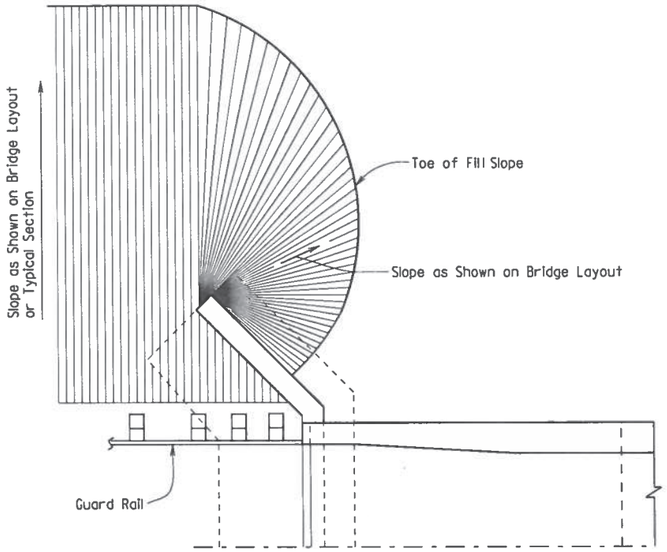
EMBANKMENT CONSTRUCTION AND FOOTING BACKFILL AT VERTICAL WALL ABUTMENTS



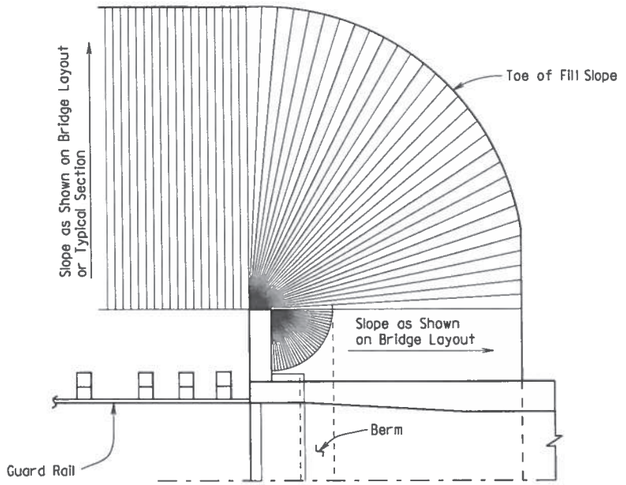
EMBANKMENT CONSTRUCTION AT SPILL-THROUGH PILE END BENTS



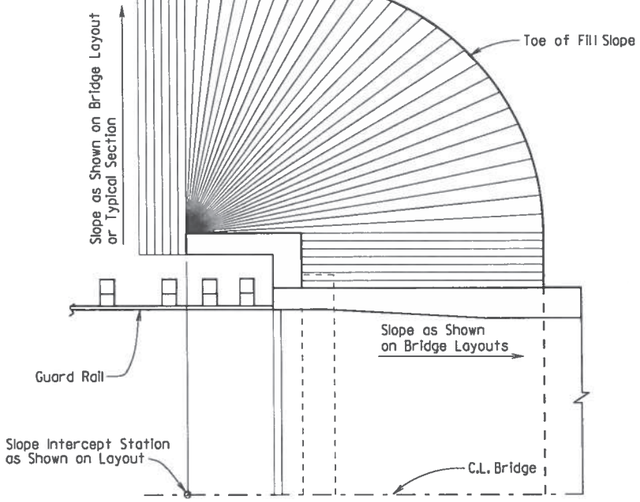
EMBANKMENT CONSTRUCTION AND FOOTING BACKFILL AT SPILL-THROUGH END BENTS



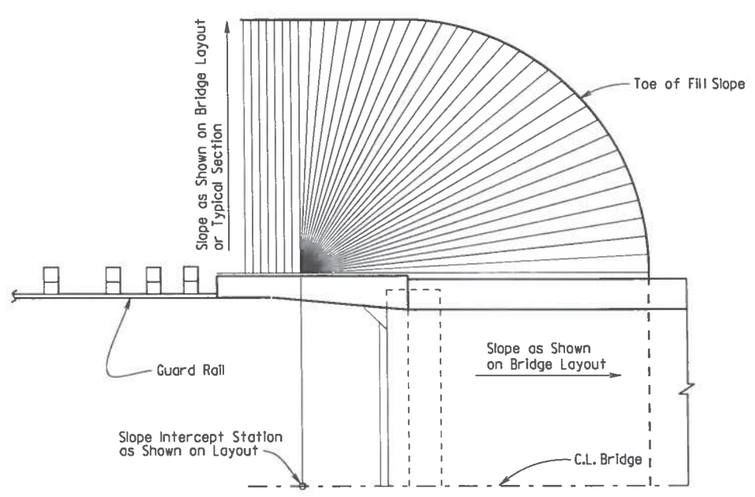
VERTICAL WALL ABUTMENTS



SPILL-THROUGH END BENTS WITH STUB WING



SPILL-THROUGH END BENTS WITH TURNBACK WING



SPILL-THROUGH END BENTS WITH TRANSITION WING

METHOD OF DETERMINING FILL SLOPE LOCATION AT BRIDGE ENDS

GENERAL NOTES

The Bridge End Embankment shall be defined as a section of embankment, not less than 20 feet long adjacent to the bridge end, together with the side slopes and slopes under the bridge end including around the end of wingwalls. Embankment adjacent to structures shall be constructed in 6 inch horizontal layers (loose measure) and compacted by the use of mechanical equipment to the satisfaction of the Engineer. Refer to Subsections 210.09, 210.10 and 801.08 for construction requirements.

STANDARD DETAILS FOR EMBANKMENT CONSTRUCTION AND BACKFILL AT BRIDGE ENDS

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

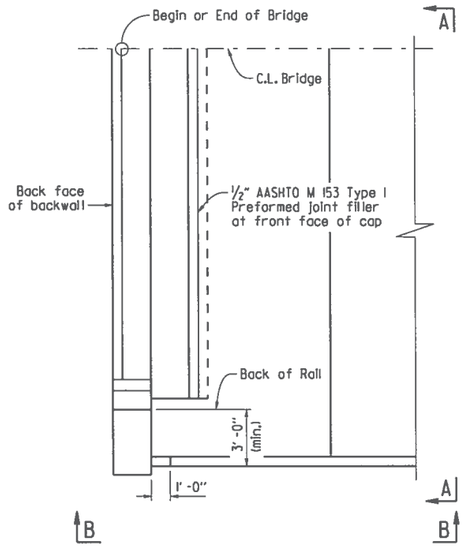
DRAWN BY: KDH DATE: 2-27-2014 FILENAME: b55000.dgn
CHECKED BY: BEF DATE: 2-27-2014 SCALE: NO SCALE
DESIGNED BY: STD. DATE: -

DRAWING NO. 55000

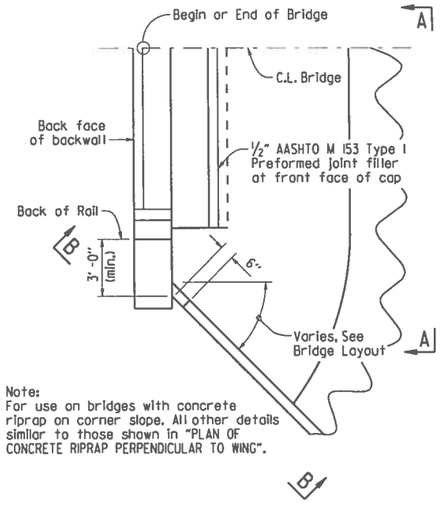
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.			105	

① CONCRETE RIPRAP 55002

Note:
Sloped surfaces of concrete riprap to be marked off into blocks (construction joints optional) with an approved grooving tool, spacing the grooved lines about 5' apart.



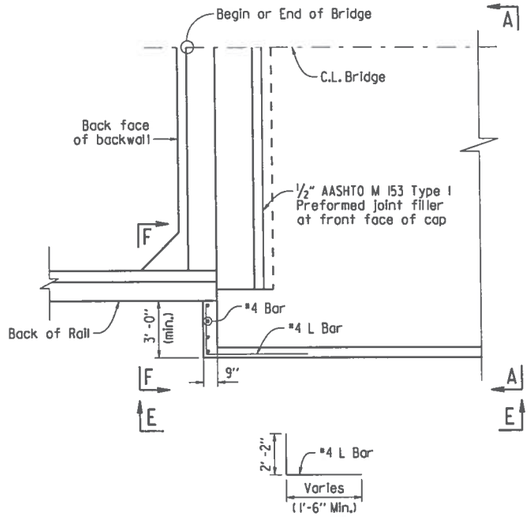
PLAN OF CONCRETE RIPRAP PERPENDICULAR TO WING
1/4" = 1'-0"



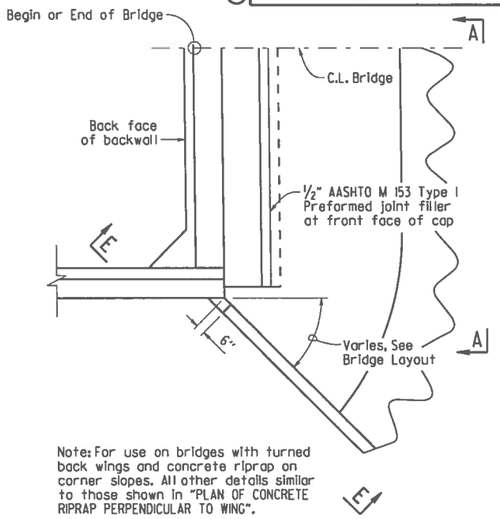
Note:
For use on bridges with concrete riprap on corner slope. All other details similar to those shown in "PLAN OF CONCRETE RIPRAP PERPENDICULAR TO WING".

PLAN OF CONCRETE RIPRAP AT ANGLE TO WING
1/4" = 1'-0"

Note:
For use on bridges with turned back wings. All other details similar to those shown in "PLAN OF CONCRETE RIPRAP PERPENDICULAR TO WING".



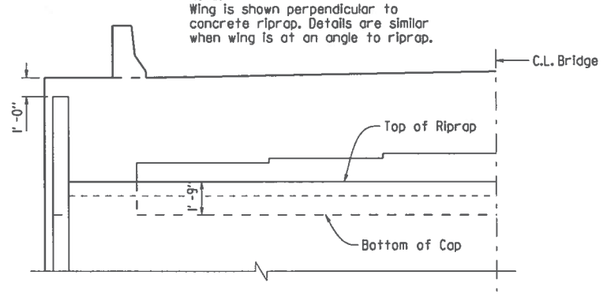
PLAN OF CONCRETE RIPRAP PERPENDICULAR TO TURNED BACK WING
1/4" = 1'-0"



Note: For use on bridges with turned back wings and concrete riprap on corner slopes. All other details similar to those shown in "PLAN OF CONCRETE RIPRAP PERPENDICULAR TO WING".

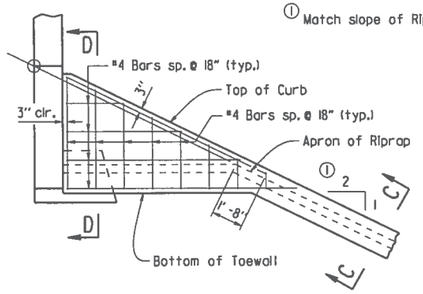
PLAN OF CONCRETE RIPRAP AT ANGLE FROM TURNED BACK WING
1/4" = 1'-0"

Note:
Wing is shown perpendicular to concrete riprap. Details are similar when wing is at an angle to riprap.

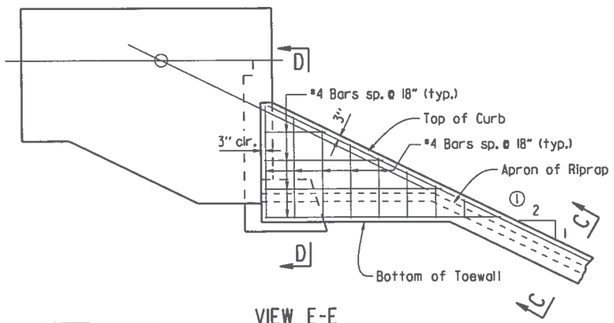


VIEW A-A
1/4" = 1'-0"

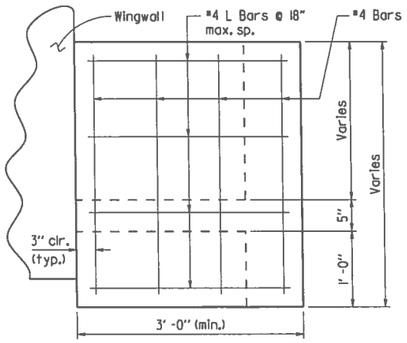
① Match slope of Riprap Apron.



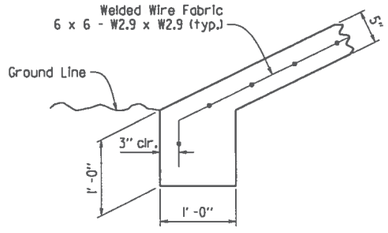
VIEW B-B
1/4" = 1'-0"



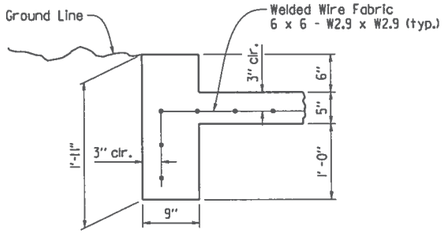
VIEW E-E
1/4" = 1'-0"



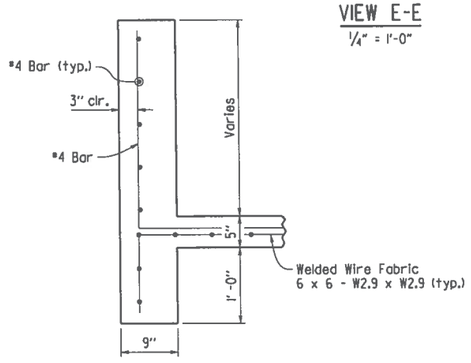
VIEW F-F
1" = 1'-0"



TOE OF CONCRETE RIPRAP
1" = 1'-0"



SECTION C-C
1" = 1'-0"



SECTION D-D
1" = 1'-0"

GENERAL NOTES

All concrete shall be Class A with a minimum compressive strength, f'c = 2,100 psi.

Welded wire fabric shall conform to AASHTO M55 or M221.

STANDARD DETAILS FOR CONCRETE RIPRAP

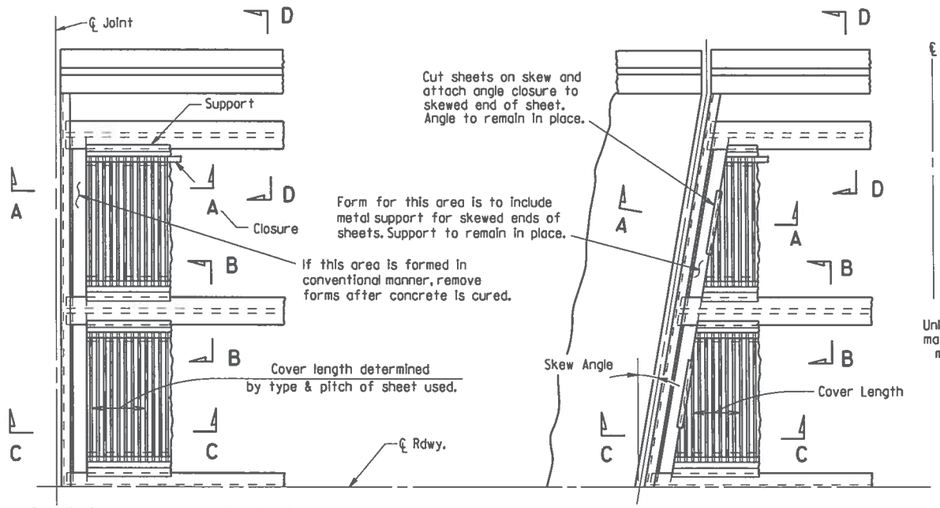
ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: ACP DATE: 2/27/2014 FILENAME: b55002.dgn
CHECKED BY: BEF DATE: 2/27/2014 SCALE: AS SHOWN
DESIGNED BY: Std. DATE: ---

DRAWING NO. 55002

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.			106	
				① BRIDGE DECK FORMS			55005	

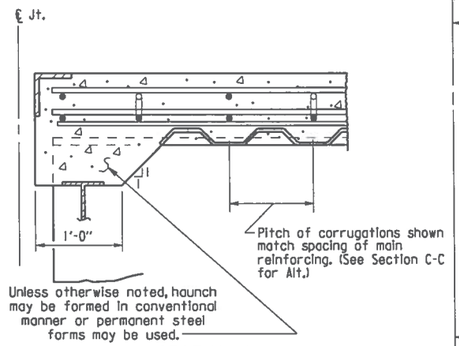


PART PLAN - SQUARE SPAN

3/8" = 1'-0"

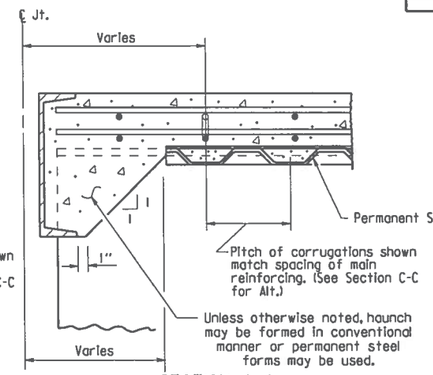
PART PLAN - SKEWED SPAN

3/8" = 1'-0"



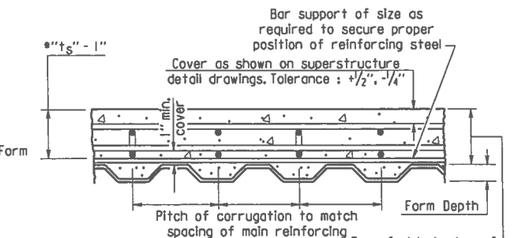
SECTION A-A

N.T.S.
(Angle at end of span)



SECTION A-A

N.T.S.
(Channel at end of span)

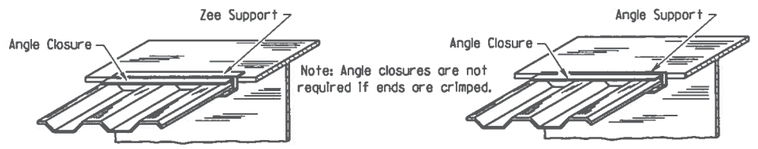


SECTION C-C

1" = 1'-0"

SECTION C-C - ALTERNATE

1" = 1'-0"
(Applicable when corrugations do not match spacing of main reinforcement)



SKETCH OF PERMISSIBLE SUPPORTS

N.T.S.

*t_s = slab thickness as shown on superstructure detail drawings.

GENERAL NOTES

Permanent steel deck forms may be used at the Contractor's option and shall be at no additional cost to the Department. Such use may result in changes to the dead load deflection of the girder. Any cost for adjustments due to a change in the dead load deflection will be borne by the Contractor. Payment for deck concrete and structural steel will not be increased due to use of permanent steel deck forms.

Permanent steel deck forms shall conform to Subsection 802.14(b). Detailed plans, including detailed calculations and manufacturer's technical brochure, shall be submitted to and approved by the Engineer before work of forming the bridge deck is started.

Welding of form supports to the tension flange of steel girders will be permitted only in areas where shear connectors are used. When welding is not allowed, the method of fastening Z or ∠ supports to the flange must be approved by the Engineer.

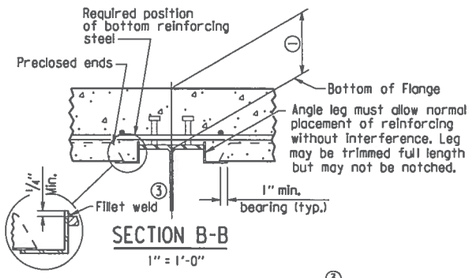
Form sheets shall be fastened to supporting members and to each other with galvanized metal screws sufficient in size and number to provide a secure attachment. Alternate methods of attachment must be approved by the Engineer.

When the pitch of form corrugations match the reinforcing spacing, transversely align form sheets across the bridge to maintain the correct orientation of continuous reinforcing bars in the corrugations.

Bar support rods, when used, shall be sized and spaced to adequately support the bottom reinforcing mat at the required position.

High chairs shall be sized to support the top mat of reinforcing at the proper position. High chairs shall be placed at locations shown on the detail drawings.

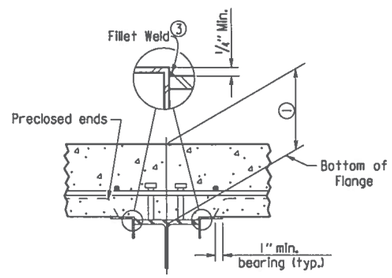
Specifications: Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction (2014 Edition), with applicable Supplemental Specifications and Special Provisions.



SECTION B-B

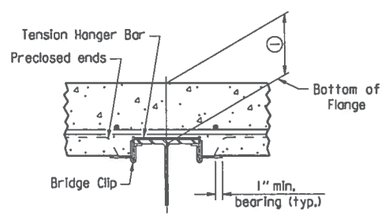
1" = 1'-0"
(Showing permissible support for tension flange where shear connectors are used, and for all compression flanges)

③ Minimum weld: 1/8" x 1' @ 18". More weld may be required; maximum length per weld = 1 1/2" (typ.)



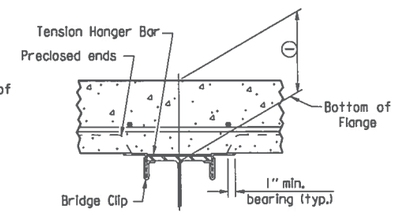
SECTION B-B

1" = 1'-0"
(Showing permissible support for tension flange where shear connectors are used and for all compression flanges)



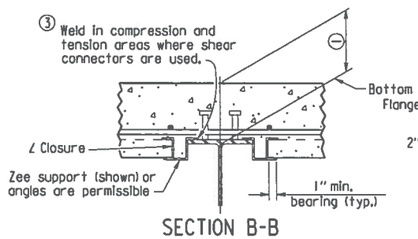
SECTION B-B

1" = 1'-0"
(Showing permissible support for tension flange where shear connectors are not used)



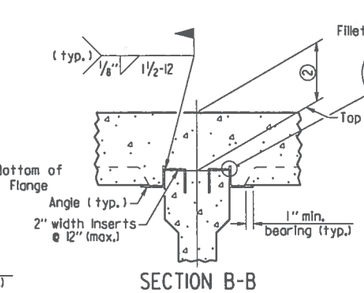
SECTION B-B

1" = 1'-0"
(Showing permissible support for tension flange where shear connectors are not used)



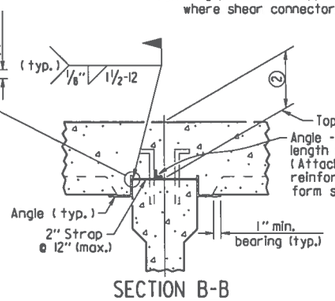
SECTION B-B

1" = 1'-0"
(Showing ∠ Closure)



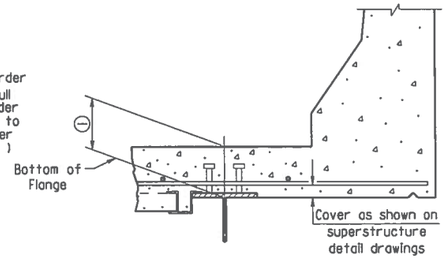
SECTION B-B (FOR CONCRETE GIRDERS)

1" = 1'-0"
(Showing support by insert cast in girder)



SECTION B-B (FOR CONCRETE GIRDERS)

1" = 1'-0"
(Showing support by Strap)



SECTION D-D

1" = 1'-0"
Note: Only Bottom Reinforcing is shown.

① Distance from top of slab to bottom of top flange as measured at centerline girder and as shown on superstructure detail drawings. This dimension may vary within the following limits to maintain the grade and slab thickness tolerances : Minimum - occurs when either the top flange or the support angle leg contacts the bottom reinforcing steel; Maximum = t_S + 1 3/4" + flange thickness. See Section C-C for slab thickness tolerance between adjacent girder flanges.

② Distance from top of slab to top of girder as measured at centerline girder and as shown on superstructure detail drawings. This dimension may vary within the following limits to maintain the grade and slab thickness tolerances : Minimum - occurs when either the top of girder or the support angle leg contacts the bottom reinforcing steel; Maximum - value shown on the superstructure detail drawings when removable forms are used. See Section C-C for slab thickness tolerance between adjacent girder flanges.

STANDARD DETAILS FOR PERMANENT STEEL BRIDGE DECK FORMS FOR STEEL & CONCRETE GIRDER SPANS

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: KDH DATE: 2-27-2014 FILENAME: b55005.dgn
CHECKED BY: BEF DATE: 2-27-2014 SCALE: NONE
DESIGNED BY: STD. DATE: —

DRAWING NO. 55005

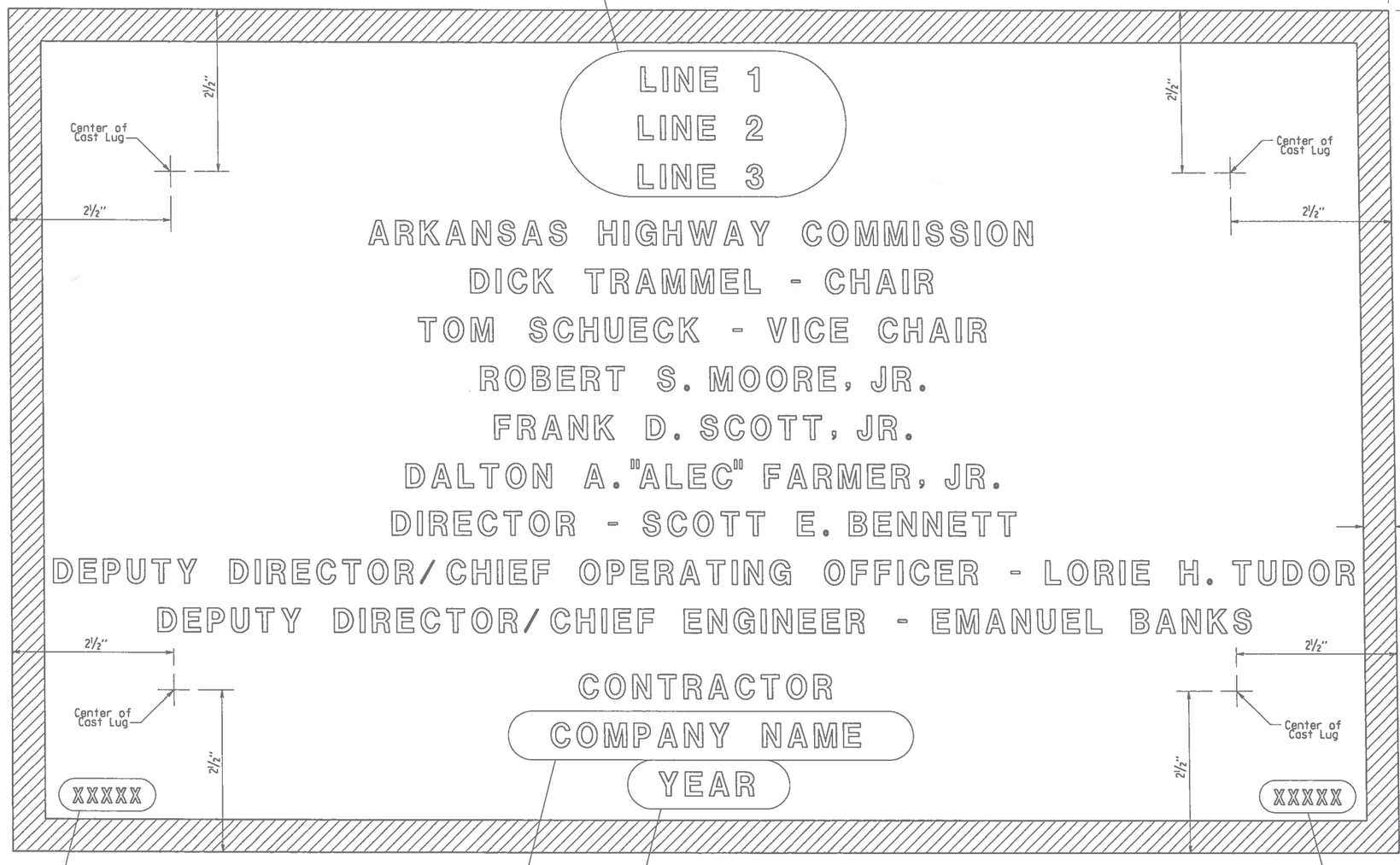
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED
12-1-14			
1-14-15			

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.			107	

(1) TYPE D NAME PLATE 55010

The name of the bridge as shown on the plans shall be placed on Lines 1 - 3 using 1/8" raised letters and numerals 3/8" high.

	Example 1	Example 2	Example 3	Example 4
Line 1	Red River	Southern	Saline	
Line 2	Relief	Railroad	River	Highway 5
Line 3		Overpass	Relief	



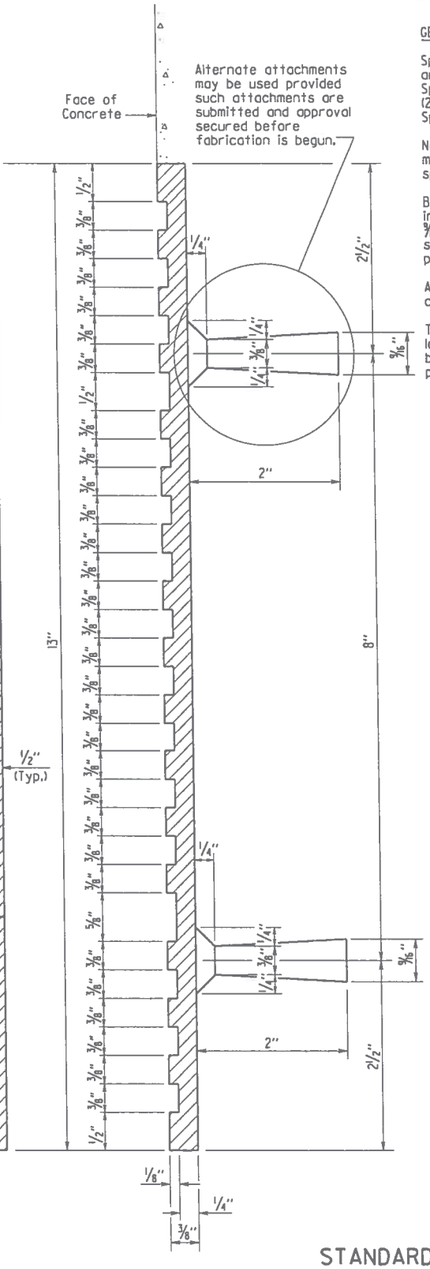
Place the design live loading here using 1/8" raised letters and numerals 1/4" high. Examples : HS 20
HL-93

Place the name of the company awarded the construction contract here using 1/8" raised letters and numerals 3/8" high. Example : ABCD CONSTRUCTION, INC.

Place the Year in which Contract was awarded here using 1/8" raised numerals 3/8" high. Example : 2001

Place the Bridge number here using 1/8" raised letters and numerals 1/4" high. Examples : A1234
05432

TYPICAL BRIDGE NAME PLATE



GENERAL NOTES

Specifications: Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction, (2014 Edition) with applicable Supplemental Specifications and Special Provisions.

Name plates shall be cast bronze and shall meet the material requirements as specified in Section 812.

Body of plate shall be 1/4" thick and shall include four tapering cone lugs 3/8" to 9/16"x 2" long. The border and all lettering shall be raised 1/8" above the face of plate and shall be polished.

All lettering shall be plain gothic, square cut and not tapered.

The number of plates required and the location and name on the plate for each bridge shall be as designated on the plans.

(2) Revised Chair and Vice Chair Added New Commissioner
1-14-15 KDH Checked By: CRE

(1) Revised Deputy Director/ Chief Engineer Added Deputy Director/ Chief Operating Officer
12-1-14 KDH Checked By: CRE

STANDARD DETAILS FOR TYPE D BRIDGE NAME PLATE

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: KDH DATE: 2-27-2014 FILENAME: b55010.dgn
CHECKED BY: BEF DATE: 2-27-2014 SCALE: NO SCALE
DESIGNED BY: STD. DATE: —

DRAWING NO. 55010

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.			108	

(1) STEEL H-PILES 55020

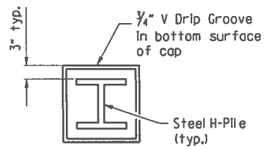
GENERAL NOTES FOR STEEL H-PILES:

Steel H-Piles shall conform to AASHTO M 270, Grade 36 or greater.

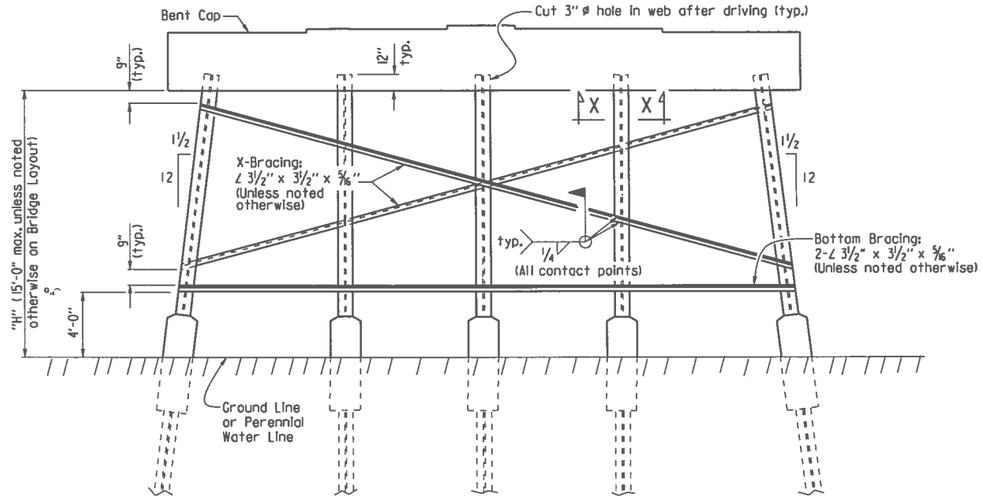
See Bridge Layout and Bent Details for pile size, estimated length, spacing, pile anchorage (if required) and for driving information.

Steel H-Piles that extend above the ground and are not protected by pile encasement shall be painted in accordance with Subsection 805.02.

Brackets, lugs, cap plates, pile tips, driving points, pile painting, splicing and welding shall not be paid for directly, but shall be considered subsidiary to the item "Steel Piling".



VIEW X-X



Notes:
All bracing shall be cut and welded in the field. Each brace shall be furnished in one piece. Payment shall be made under Item 807.

Unless noted otherwise, omit X-Bracing when "H" is less than 8 feet.

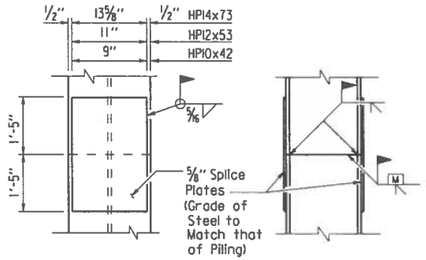
Omit X-Bracing and Bottom Bracing when "H" is 5 feet or less.

When required on the Bridge Layout sheet, pile encasements shall be constructed. See Notes and Details for H-Pile Encasements.

Omit all bracing (and V-groove in cap) when pile encasement is extended to bottom of bent cap.

TYPICAL DETAILS OF H-PILE TRESTLE INTERMEDIATE BENT

(Shown with Partial Height Encasement)

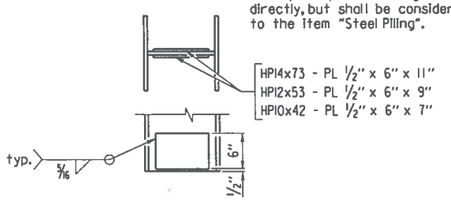


Note:
The Contractor may for his own convenience and at his own expense provide as many as three splices per pile. Minimum spacing between splices shall be 5 feet.

TYPICAL SPLICE DETAILS

Notes:
Steel pile tip reinforcing not required when approved H-Pile driving points are used.

Steel pile tip reinforcing shall not be paid for directly, but shall be considered subsidiary to the item "Steel Piling".



REINFORCING DETAIL FOR STEEL H-PILE TIP

GENERAL NOTES FOR H-PILE ENCASEMENTS:

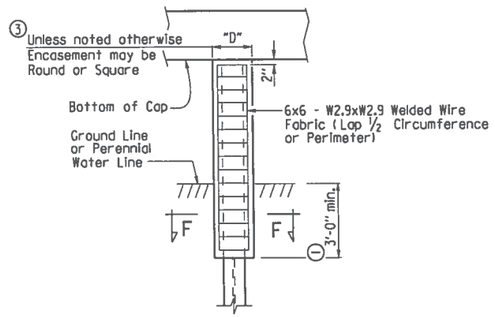
See Bridge Layout for additional notes and required location of pile encasements.

All concrete shall be Class S with a minimum 28-day compressive strength, f'c = 3,500 psi. If concrete cannot be placed in the dry, Seal Concrete may be used from top to bottom of encasement.

Reinforcing steel shall be Grade 60 conforming to AASHTO M 31 or M 322, Type A.

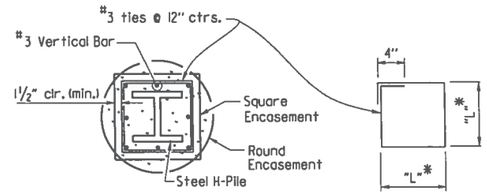
Welded Wire Fabric shall conform to AASHTO M 55 or M 221. Galvanized Corrugated Steel Pipe shall conform to AASHTO M 36 and M 218.

Concrete, welded wire fabric or reinforcing steel and galvanized pipe shall not be paid for directly, but shall be considered subsidiary to the item "Pile Encasement".



PILE ENCASEMENT DETAIL FOR STEEL H-PILES

(4) (Shown with Encasement to Bottom of Cap)

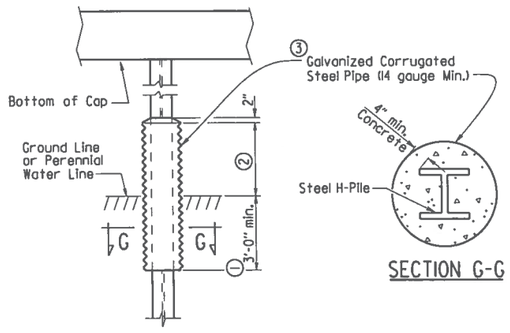


SECTION F-F

*Measured out-to-out of bar.

TABLE OF VARIABLES FOR PILE ENCASEMENT

Pile Size	"D" Square Encsmt.	"D" Round Encsmt.	"L"*
HP10x42	1'-7"	2'-0"	1'-4"
HP12x53	1'-8"	2'-2"	1'-5"
HP14x73	1'-11"	2'-6"	1'-8"



SECTION G-G

(5) ALTERNATE PILE ENCASEMENT DETAIL FOR STEEL H-PILES

(Shown with Partial Height Encasement)

(1) Unless otherwise noted on Bridge Layout.

(2) 3'-0" minimum or as shown on Bridge Layout.

(3) Encasement dimensions shall be sized to maintain a minimum concrete cover of 4" from the H-Pile. Reinforcement shall be sized to provide a minimum concrete cover of 1½" and a minimum clearance of 1¼" from the pile.

(4) Alternate pile encasement, when not extended to bottom of cap, shall have 2" concrete taper for water runoff as shown in the Partial Height Encasement detail.

(5) Alternate pile encasement may not be allowed. See Bridge Layout.

This document was originally issued and sealed by Carl J. Fuselier, PE No. 7510, on February 27, 2014. This copy is not a signed and sealed document.

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7510
CARL J. FUSELIER

BRIDGE ENGINEER

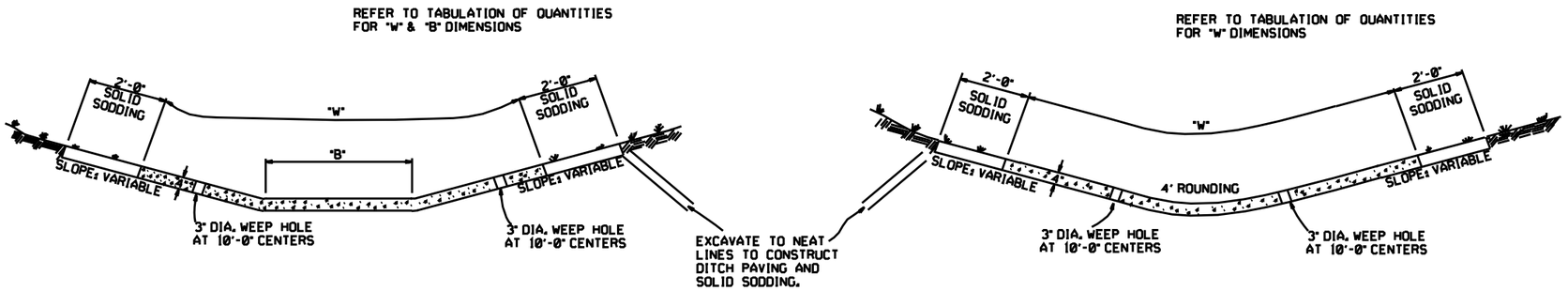
STANDARD DETAILS FOR STEEL H-PILES AND PILE ENCASEMENTS

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: A.M.S. DATE: 2/27/2014 FILENAME: b55020.dgn
CHECKED BY: B.E.F. DATE: 2/27/2014 SCALE: NO SCALE
DESIGNED BY: STD. DATE: —

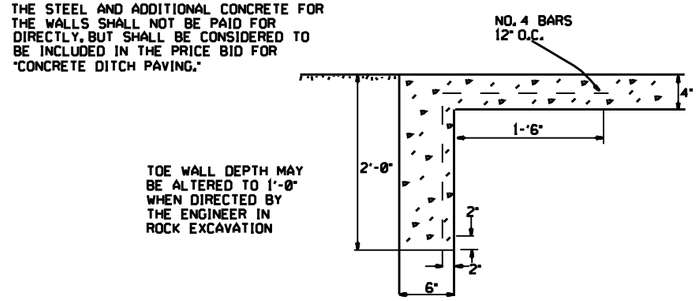
DRAWING NO. 55020



TYPE A

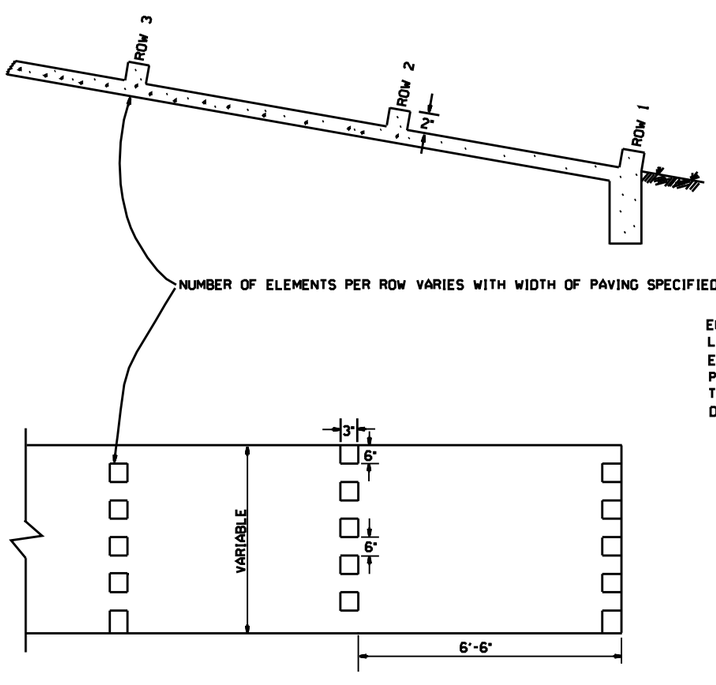
TYPE B

THE STEEL AND ADDITIONAL CONCRETE FOR THE WALLS SHALL NOT BE PAID FOR DIRECTLY, BUT SHALL BE CONSIDERED TO BE INCLUDED IN THE PRICE BID FOR "CONCRETE DITCH PAVING."



TOE WALL DEPTH MAY BE ALTERED TO 1'-0" WHEN DIRECTED BY THE ENGINEER IN ROCK EXCAVATION

TOE WALL DETAIL FOR CONCRETE DITCH PAVING



ENERGY DISSIPATORS TO BE USED FOR THE ENTIRE LENGTH OF DITCH WHEN SLOPE OF DITCH PAVING EXCEEDS 7%. THE DISSIPATORS WILL NOT BE PAID FOR DIRECTLY, BUT SHALL BE CONSIDERED TO BE UNCLUDED IN THE PRICE BID FOR CONCRETE DITCH PAVING.

ENERGY DISSIPATORS
(NO SCALE)

GENERAL NOTES:

THE FULL WIDTH OF EACH SECTION SHALL BE POURED MONOLITHICALLY.

TOE WALLS TO BE CONSTRUCTED FULL WIDTH AT EACH END OF DITCH PAVING, AND POURED MONOLITHICALLY.

SOLID SOD ALONG DITCH PAVING TO BE PLACED WITHIN 14 DAYS OF DITCH PAVING CONSTRUCTION.

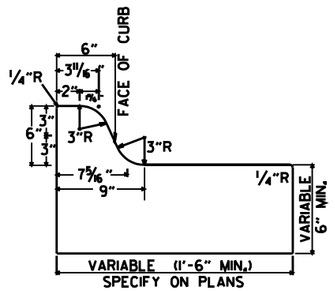
1" WIDE TRANSVERSE EXPANSION JOINTS SHALL BE PLACED IN CONCRETE DITCH PAVING AT 45' INTERVALS. THE SPACE SHALL BE FILLED WITH APPROVED JOINT FILLER COMPLYING WITH AASHTO M213.

DATE	REVISION	DATE FILM'D
11-17-10	ADDED GENERAL NOTE	
6-2-94	ADDED GENERAL NOTE ABOUT SOLID SODDING	
11-30-8	ELIMINATED MIN. ROWS OF ELEMENTS	111-30-89
7-15-88	REVISED DISSIPATOR NOTE	653-7-15-88
4-3-87	REVISED ENERGY DISSIPATOR	671-4-3-87
1-9-87	MODIFIED NOTE ON ENERGY DISS.	532-1-9-87
11-3-86	ADDED NOTE TO ENERGY DISS.	599-12-1-86
11-1-84	ENERGY DISSIPATOR DETAILS ADDED	508-11-1-84
11-1-84	EXCAVATION DETAILS ADDED TYPED A & B	
10-2-72	REVISED AND REDRAWN	508-10-2-72

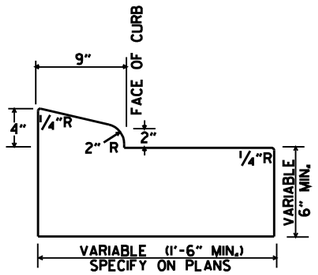
ARKANSAS STATE HIGHWAY COMMISSION

CONCRETE DITCH PAVING

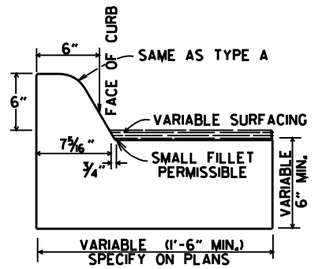
STANDARD DRAWING CDP-1



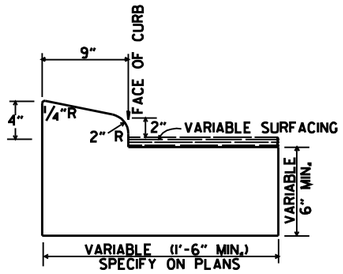
TYPE A



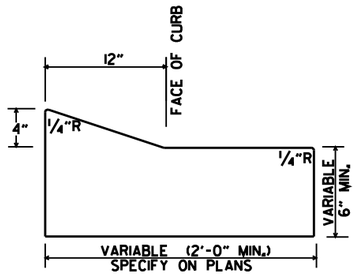
TYPE B-1



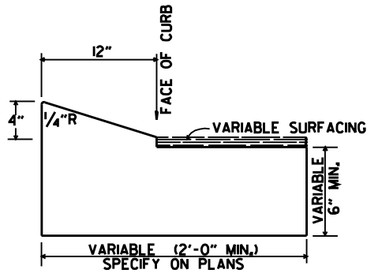
TYPE C



TYPE B-2

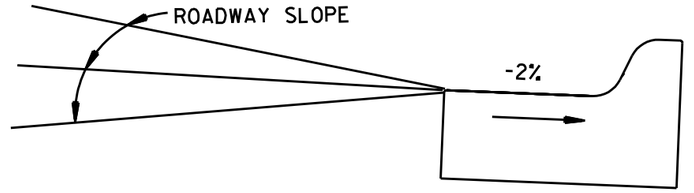


TYPE E-1



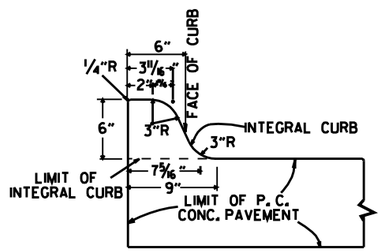
TYPE E-2

CONCRETE COMBINATION CURB AND GUTTER

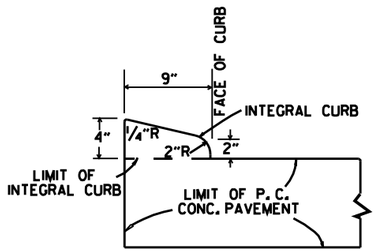


DETAIL OF GUTTER SLOPE

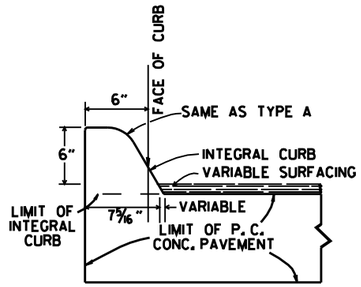
GUTTER SHALL BE CONSTRUCTED ON 2% SLOPE AWAY FROM ROADWAY, REGARDLESS OF ROADWAY SLOPE.



TYPE A

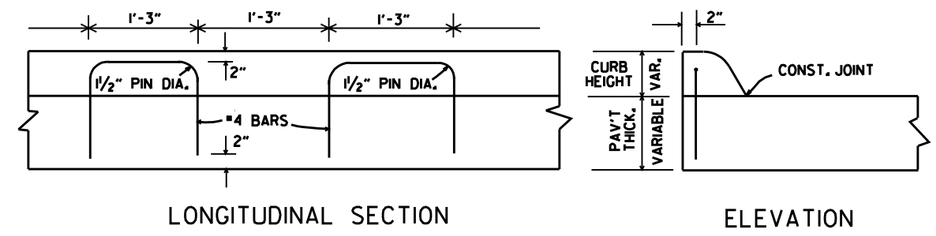


TYPE B

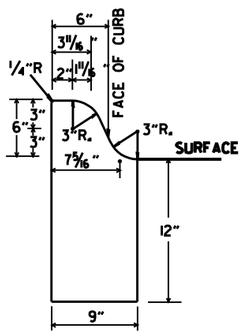


TYPE C

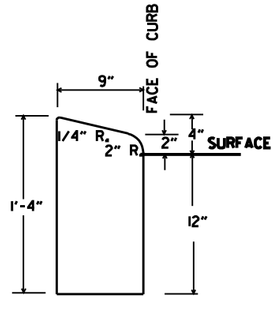
INTEGRAL CURB



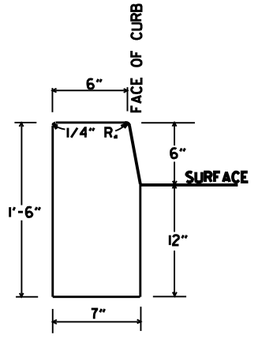
ALTERNATE CONSTRUCTION METHOD FOR INTEGRAL CURB



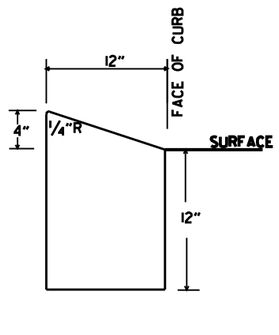
TYPE A



TYPE B

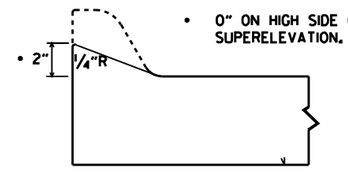


TYPE D



TYPE E

CONCRETE CURB



NOTE: USE MODIFIED CURB AS SPECIFIED ON STD. DR-1. COMPENSATION FOR MODIFIED CURB WILL BE CONSIDERED INCLUDED IN THE PRICE BID FOR THE TYPE OF CURB OR CURB AND GUTTER SPECIFIED.

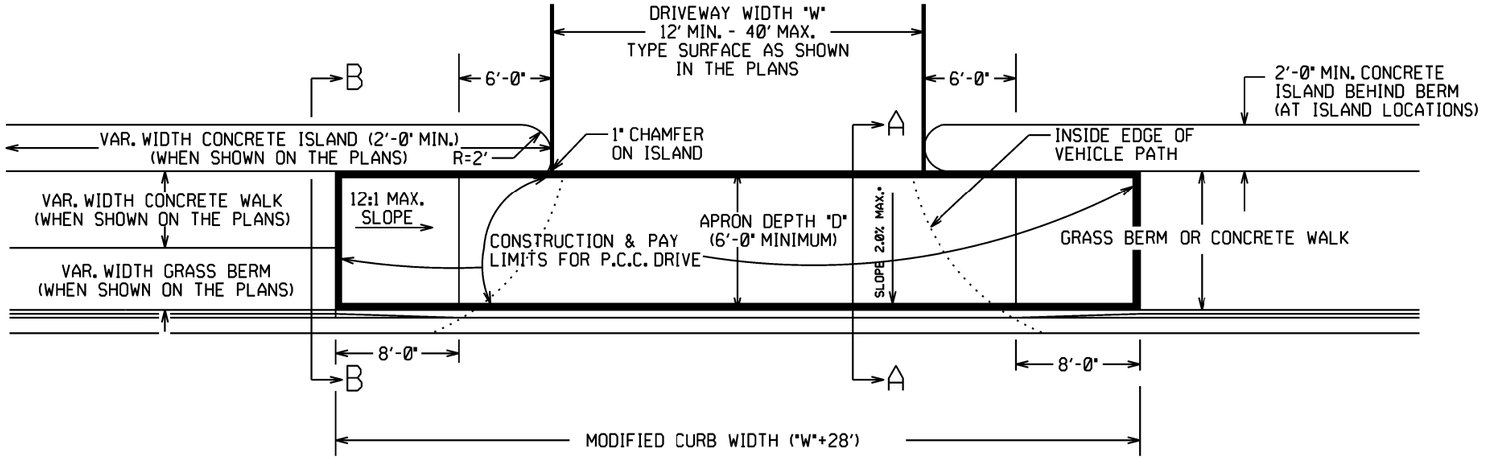
DETAILS OF MODIFIED CURB

DATE	REVISION	DATE FILMED
11-29-07	REVISED GUTTER SLOPE & MODIFIED CURB DETAILS	
11-10-05	ADDED DETAILS OF TYPE E CURBS	
11-16-01	REVISED CONCRETE CURB TYPE B	
11-18-98	REVISED MODIFIED CURB	
6-2-94	ADDED NOTE TO SPECIAL MODIFIED CURB	
8-5-93	CORRECTED GUTTER SLOPE	8-5-93
10-1-92	ADDED DETAILS OF GUTTER SLOPE	10-1-92
5-24-90	ADDED DETAILS OF MODIFIED CURB	5-24-90
11-30-89	VARIBLE DEPTH TYPE A & B I	11-30-89
7-15-88	REVISED MODIFIED CURB	630-7-15-88
11-1-73	REVISED MODIFIED CURB	500-11-1-73
10-2-72	REVISED AND REDRAWN	52-10-2-72

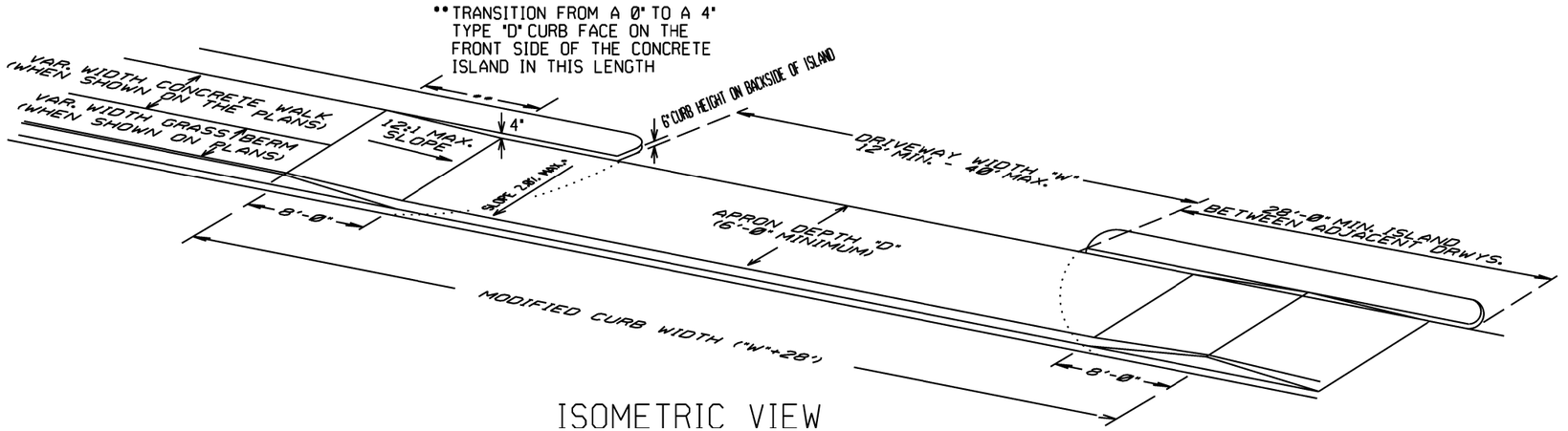
ARKANSAS STATE HIGHWAY COMMISSION

CURBING DETAILS

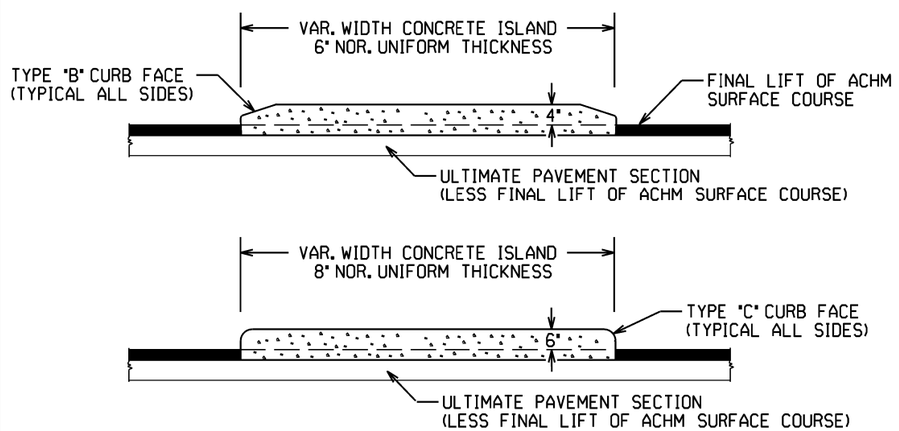
STANDARD DRAWING CG-1



PLAN VIEW

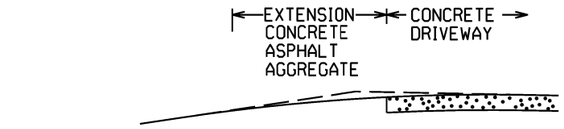


ISOMETRIC VIEW



CURBED ISLANDS FOR CHANNELIZATION

REFER TO PLANS FOR TYPE OF CURB FACE TO BE USED. NO DIRECT PAYMENT WILL BE MADE FOR THE CURB FACES SHOWN ON THE ISLAND DETAILS. PAYMENT FOR THE CURB FACE WILL BE INCLUDED IN THE UNIT PRICE BID FOR THE ITEM "CONCRETE ISLAND".



EXTENSION TYPICAL SECTIONS

1: CONCRETE - 6" P.C. CONCRETE DRIVEWAY

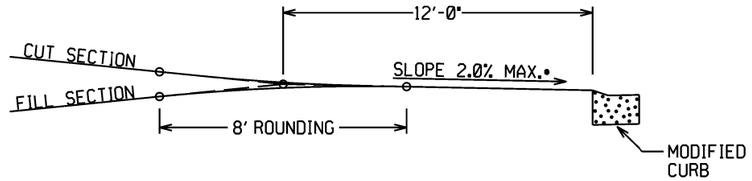
2: ASPHALT - 2" ACHM SURFACE COURSE (1/2")
4" ACHM BINDER COURSE.(1") OR
4" ACHM BASE COURSE (1-1/2")

3: ASPHALT - 2" ACHM SURFACE COURSE (1/2")
7" AGGREGATE BASE COURSE

4: AGGREGATE - 6" AGGREGATE BASE COURSE

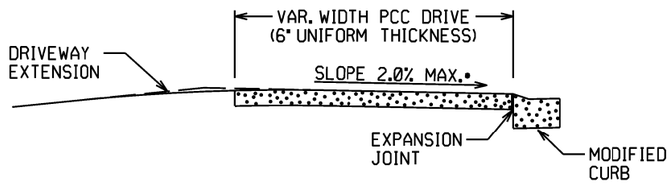
THE TYPE OF EXTENSION SHALL BE AS SHOWN IN THE PLANS. THE CONTRACTOR MAY, WITH THE APPROVAL OF THE ENGINEER, SUBSTITUTE A LOWER NUMBERED TYPE OF EXTENSION IN LIEU OF THE TYPE SPECIFIED IN THE PLANS, BUT AT NO ADDITIONAL COST TO THE DEPARTMENT.

DRIVEWAY EXTENSION DETAILS

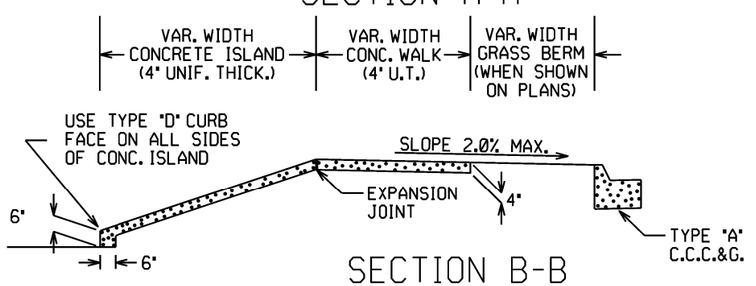


DRIVEWAY VERTICAL ALIGNMENT DETAILS

- NOTE: DRIVEWAYS MAY NOT BE SLOPED AWAY FROM THE ROADWAY UNLESS APPROVED BY THE ENGINEER.



SECTION A-A



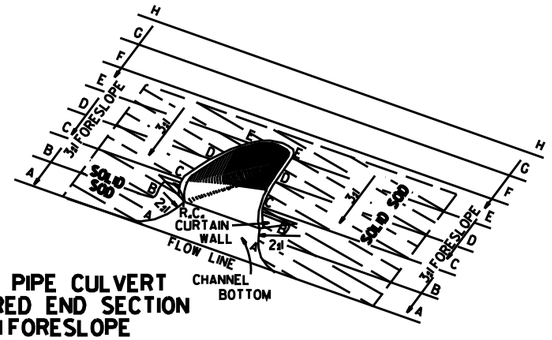
SECTION B-B
CURBED ISLAND BEHIND WALK

DATE REV	DATE FILMED	DESCRIPTION
2-27-14		REVISED PLAN & ISOMETRIC VIEW
11-29-07		ADDED CHANNELIZATION ISLAND WITH TYPE C CURB FACE & REVISED DRIVEWAY SLOPE NOTE & VERTICAL ALIGNMENT DETAIL
11-10-05		REV. APRON SLOPE & DEPTH OF AGG. BASE.
8-22-02		ADDED ISLAND DETAILS & NOTES
3-30-00		REV. MOD. CURB WIDTH & TRANS. NOTE
11-19-98		REVISED NOTES
11-18-98		REDRAWN AND REISSUED

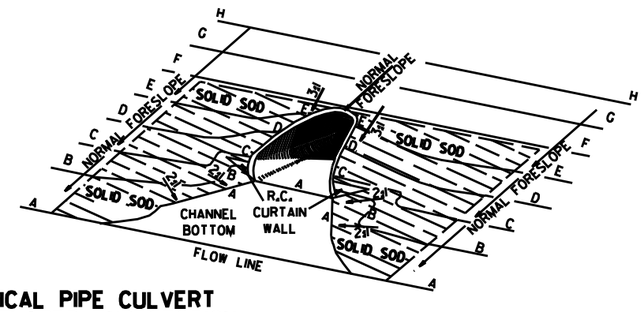
ARKANSAS STATE HIGHWAY COMMISSION

DETAILS OF DRIVEWAYS & ISLANDS

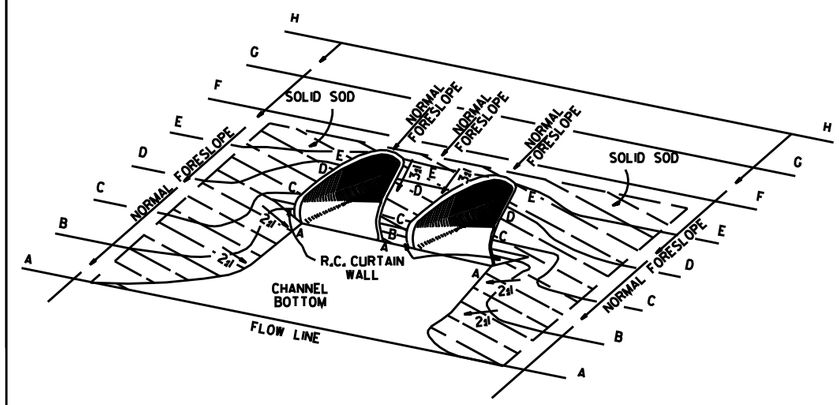
STANDARD DRAWING DR-1



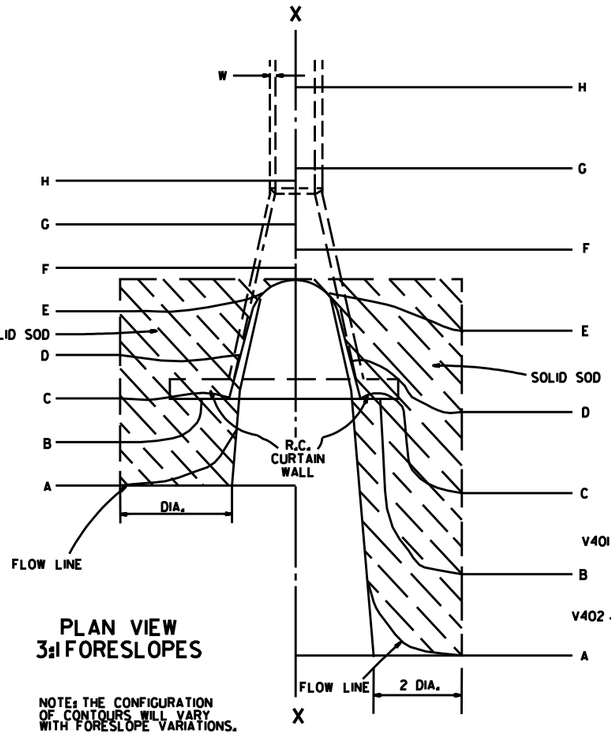
TYPICAL PIPE CULVERT
WITH FLARED END SECTION
& 3:1 FORESLOPE



TYPICAL PIPE CULVERT
WITH FLARED END SECTION
& FLATTENED ADJACENT SLOPES



TYPICAL MULTIPLE PIPE CULVERT
WITH FLARED END SECTIONS
& FLATTENED ADJACENT SLOPES



PLAN VIEW
3:1 FORESLOPES

NOTE: THE CONFIGURATION OF CONTOURS WILL VARY WITH FORESLOPE VARIATIONS.

PLAN VIEW
FLATTENED FORESLOPES

R.C. CURTAIN WALL DIMENSIONS & QUANTITIES

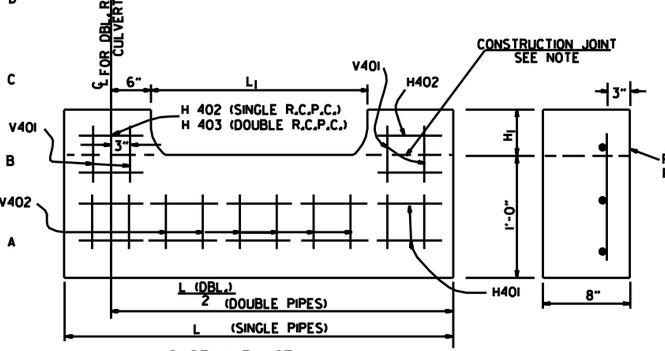
PIPE DIA.	H_1	L_1	L	L (DBL.)/2	SINGLE R.C.P.C. CONC.	SINGLE R.C.P.C. REINF. STEEL	DOUBLE R.C.P.C. CONC.	DOUBLE R.C.P.C. REINF. STEEL
					CU. YDS.	LBS.	CU. YDS.	LBS.
18"	11½"	3'-5"	8'-0"	6'-3"	0.31	27.7	0.45	39.5
24"	1'-0½"	4'-6"	9'-6"	7'-6"	0.37	33.4	0.53	48.0
30"	1'-3½"	5'-7"	11'-0"	9'-0"	0.45	39.0	0.67	59.0
36"	1'-7"	6'-8"	13'-0"	10'-6"	0.58	52.6	0.83	73.9
42"	2'-1½"	7'-3"	15'-6"	12'-0"	0.82	77.1	1.10	100.7
48"	2'-5"	7'-10"	17'-0"	13'-0"	0.98	94.9	1.27	120.4
54"	2'-9½"	8'-5"	18'-6"	14'-0"	1.16	115.8	1.47	143.7
60"	3'-4"	9'-0"	20'-6"	15'-6"	1.47	149.7	1.84	180.3
72"	4'-5"	10'-2"	25'-6"	18'-6"	2.31	232.6	2.73	271.0

NOTE: QUANTITIES SHOWN ARE FOR ONE (1) CURTAIN WALL.

REINFORCING STEEL SCHEDULE

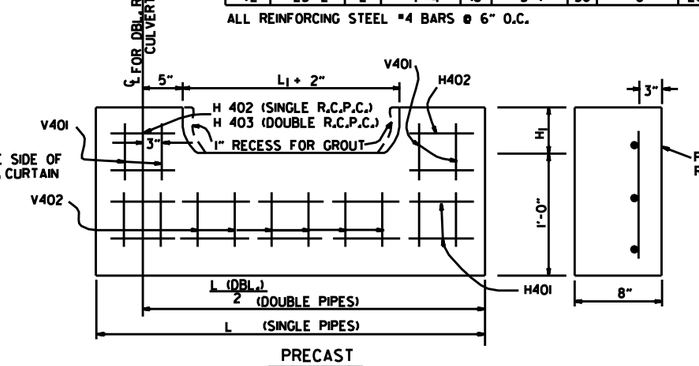
PIPE DIA.	SINGLE R.C. PIPE CULVERT H401 L	H401 NO.	H402 L	H402 NO.	V401 L	V401 NO.	V402 L	V402 NO.	DOUBLE R.C. PIPE CULVERT H401 L	H401 NO.	H402 L	H402 NO.	H403 L	H403 NO.	V401 L	V401 NO.	V402 L	V402 NO.
18"	7'-8"	2	1'-11½"	4	1'-7½"	8	8"	8	12'-2"	2	1'-11½"	4	8"	2	1'-7½"	10	8"	14
24"	9'-2"	2	2'-2"	4	1'-8½"	10	8"	9	14'-8"	2	2'-2"	4	8"	2	1'-8½"	12	8"	18
30"	10'-8"	2	2'-4½"	4	1'-11½"	10	8"	12	17'-8"	2	2'-4½"	4	8"	2	1'-11½"	14	8"	22
36"	12'-8"	2	2'-10"	6	2'-3"	12	8"	14	20'-8"	2	2'-10"	6	8"	3	2'-3"	14	8"	28
42"	15'-2"	2	3'-9½"	8	2'-9½"	16	8"	15	23'-8"	2	3'-9½"	8	8"	4	2'-9½"	18	8"	30
48"	16'-8"	2	4'-3"	10	3'-1"	18	8"	16	25'-8"	2	4'-3"	10	8"	5	3'-1"	20	8"	32
54"	18'-2"	2	4'-8½"	12	3'-5½"	20	8"	17	27'-8"	2	4'-9"	12	8"	6	3'-5½"	22	8"	34
60"	20'-2"	2	5'-5"	14	4'-0"	24	8"	18	30'-8"	2	5'-5"	14	8"	7	4'-0"	26	8"	36
72"	25'-2"	2	7'-4"	18	5'-1"	30	8"	20	36'-8"	2	7'-4"	18	8"	9	5'-1"	33	8"	40

ALL REINFORCING STEEL #4 BARS @ 6" O.C.



CAST-IN-PLACE

NOTE: THE PORTION OF THE R.C. CURTAIN WALL BENEATH THE FLARED END SECTION (LOWER 1'-0") SHALL BE PLACED MONOLITHICALLY. THE FLARED END SECTION SHALL THEN BE SET IN PLACE & THE REMAINING PORTIONS OF THE R.C. CURTAIN WALL PLACED.



PRECAST

NOTE: THE PRECAST CURTAIN WALL WILL BE SET AND BACKFILLED WITH COMPACTED MATERIAL. THE FLARED END SECTION SHALL THEN BE SET IN PLACE AND THE 1" RECESS FILLED WITH GROUT. WHERE "L" EXCEEDS 11' THE CURTAIN WALL MAY BE CAST IN TWO (2) OR MORE SECTIONS. THE METHOD OF JOINING THE SECTIONS FOR INSTALLATION SHALL BE APPROVED BY THE ENGINEER.

SOLID SODDING

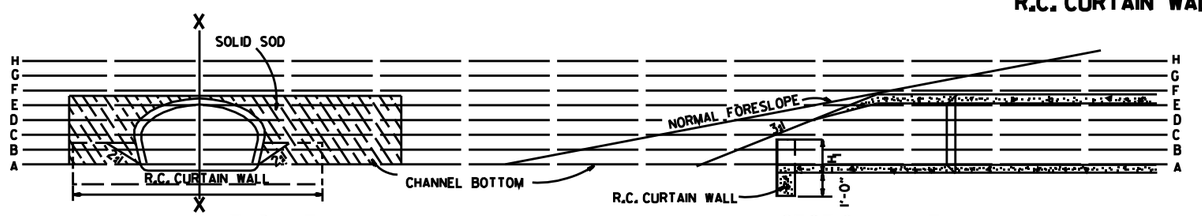
PIPE DIA.	SINGLE R.C.P.C. 3:1	SINGLE R.C.P.C. 4:1	SINGLE R.C.P.C. 6:1	DOUBLE R.C.P.C. 3:1	DOUBLE R.C.P.C. 4:1	DOUBLE R.C.P.C. 6:1
	SQ. YDS.			SQ. YDS.		
18"	5	7	12	6	8	13
24"	8	12	19	9	13	20
30"	13	18	29	14	19	30
36"	17	26	41	18	28	43
42"	23	35	55	25	37	57
48"	29	46	68	31	48	70
54"	35	57	85	37	59	87
60"	45	62	104	48	65	107
72"	64	92	156	67	95	159

NOTE: QUANTITIES SHOWN ABOVE ARE FOR ONE (1) END OF F.E.S.

GENERAL NOTES

1. A CAST-IN-PLACE OR PRECAST CURTAIN WALL MAY BE USED. PAYMENT FOR THE CURTAIN WALL SHALL BE CONSIDERED TO BE INCLUDED IN THE UNIT PRICE BID EACH FOR FLARED END SECTIONS OF THE SEVERAL SIZES, WHICH PRICE SHALL BE FULL COMPENSATION FOR FURNISHING ALL MATERIALS INCLUDING REINFORCING STEEL AND CONCRETE; FOR FORMS, MIXING AND PLACING; FOR EXCAVATION AND BACKFILL, AND FOR ALL LABOR, TOOLS, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE WORK.
2. ALL EXPOSED EDGES SHALL BE CHAMFERED ¾".
3. CONCRETE FOR CURTAIN WALL SHALL MEET THE REQUIREMENTS FOR CLASS A OR S CONCRETE AS PROVIDED IN SECTION 802 OF THE STANDARD SPECIFICATIONS OR FOR PAVING CONCRETE AS PROVIDED IN SECTION 501 OF THE STANDARD SPECIFICATIONS.
4. WELDED WIRE MESH 3 x 3 W10 x W10 MAY BE USED IN LIEU OF REINFORCING BARS.

R.C. CURTAIN WALL DETAILS



END VIEW

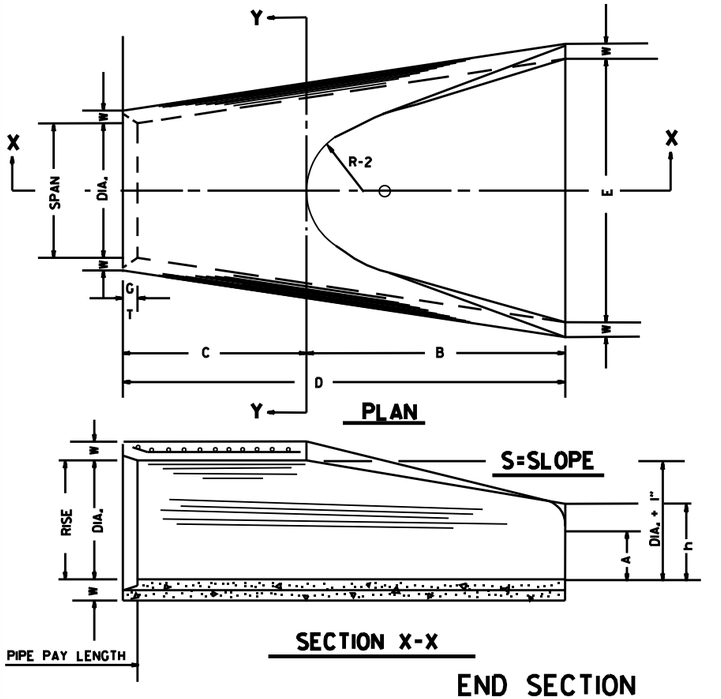
SECTIONAL VIEW "X-X"

DATE	REVISION	FILMED
10-18-96	ADDED NOTE TO SOLID SODDING	
10-12-95	CORRECTED SPELLING	
11-3-94	ADDED GENERAL NOTE NO. 4	
8-15-91	REV. CURTAIN WALL QUANT. STEEL SCH. & SOLID SOD QUANT.	
3-2-81	ALLOW PRECAST IN 2 OR MORE PIECES CHAMFER EDGES	
5-15-80	ADDED PRECAST WALL & GENERAL NOTES	
10-2-72	REVISED AND REDRAWN	

ARKANSAS STATE HIGHWAY COMMISSION

FLARED END SECTION

STANDARD DRAWING FES-1



END SECTION FOR REINFORCED CONCRETE PIPE CULVERTS

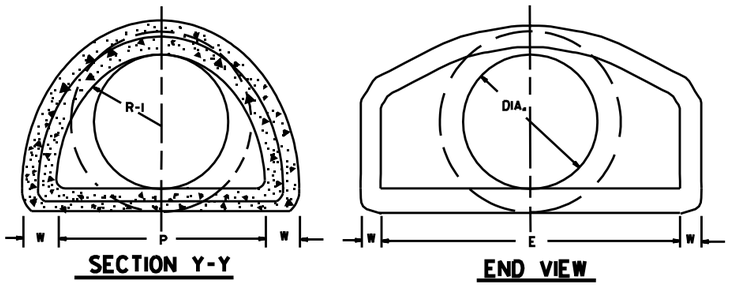
TABLE OF DIMENSIONS

DIA.	WALL	A	B	C	D	E	S	DIA. + 1"	P	R-1	R-2	G-T	WT.	h
18"	2½"	9"	2'-3"	3'-10"	6'-1"	3'-0"	3sl	19"	29"	15½"	12"	2"	1000	1'-0½"
24"	3"	9½"	3'-7½"	2'-6"	6'-1½"	4'-0"	3sl	25"	33 3/16"	16 11/16"	14"	2½"	1600	1'-1½"
30"	3½"	1'-0"	4'-6"	1'-7¾"	6'-1¾"	5'-0"	3sl	31"	37"	18½"	15"	3¼"	1940	1'-4 5/8"
36"	4"	1'-3"	5'-3"	2'-10¾"	8'-1¾"	6'-0"	3sl	37"	47 1/16"	24 5/16"	20"	3½"	4100	1'-8"
42"	4½"	1'-9"	5'-3"	2'-11"	8'-2"	6'-6"	3sl	43"	53 1/8"	27½"	22"	3½"	5380	2'-2½"
48"	5"	2'-0"	6'-0"	2'-2"	8'-2"	7'-0"	3sl	49"	56½"	28½"	22"	3½"	6550	2'-6"
54"	5½"	2'-4"	6'-6"	1'-10"	8'-4"	7'-6"	3sl	55"	65½"	33 1/8"	24"	4"	8750	2'-10½"
60"	6"	2'-10"	6'-6"	1'-10"	8'-4"	8'-0"	3sl	61"	72½"	36 11/16"	24"	4"	9270	3'-5"
72"	7"	3'-10"	6'-6"	1'-10"	8'-4"	9'-0"	3sl	73"	77 1/16"	38 5/8"	24"	5"	13250	4'-6"

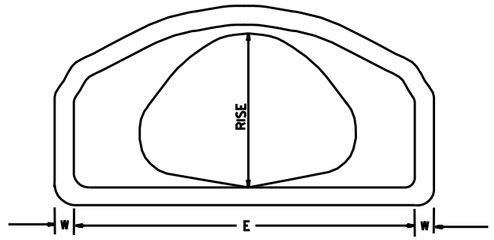
ARCH PIPE

EQUIV. DIA.	• SPAN AASHTO M 206	• SPAN AHD NOMINAL	• RISE AASHTO M 206	• RISE AHD NOMINAL	W	A	B	C	D	E	P	R2	G-T	S
	INCHES													
15	18	18	11	11	2"	4"	2'-0"	4'-0"	6'-0"	3'-0"	29"	12"	1½"	2½sl
18	22	22	13½	14	2½"	5"	2'-0"	4'-1"	6'-1"	3'-6"	32 1/8"	13"	2½"	2½sl
21	26	26	15½	16	2¾"	7"	2'-3"	3'-10"	6'-1"	4'-0"	34 1/8"	14"	2½"	2½sl
24	28½	29	18	18	3"	9"	2'-3"	3'-10"	6'-1"	5'-0"	36 5/16"	15"	2½"	2½sl
30	36¼	36	22½	23	3½"	10"	3'-1"	3'-0½"	6'-1½"	6'-0"	47 1/16"	20"	3"	2½sl
36	43¾	44	26⅝	27	4"	10½"	4'-0"	2'-1½"	6'-1½"	6'-6"	54 5/16"	22"	3½"	2½sl
42	51⅛	51	31⅝	31	4½"	11½"	4'-7"	1-10¼"	6'-5¼"	7'-2"	59½"	23"	3¾"	2½sl
48	58½	59	36	36	5"	1'-3"	5'-3"	2'-10¾"	8'-1¾"	7'-10"	70 3/16"	24"	4¼"	2½sl
54	65	65	40	40	5½"	1'-7"	5'-3"	2'-11"	8'-2"	8'-6"	72 1/16"	24"	4¾"	2¼sl
60	73	73	45	45	6"	1'-10"	5'-6"	2'-8"	8'-2"	9'-0"	77 1/16"	24"	5"	2¼sl

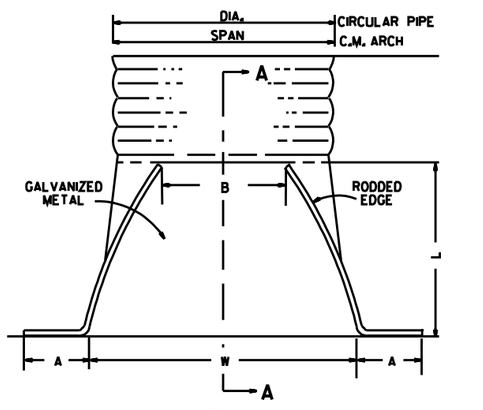
• THE MEASURED SPAN AND RISE SHALL NOT VARY MORE THAN ± 2 PER CENT FROM THE VALUES SPECIFIED BY AASHTO M 206.

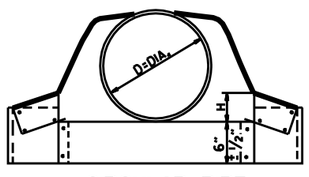


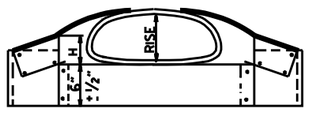
NOTE: TONGUE END ON UPSTREAM SECTION
GROOVE END ON DOWNSTREAM SECTION



END VIEW
CONCRETE ARCH PIPE







CIRCULAR PIPE

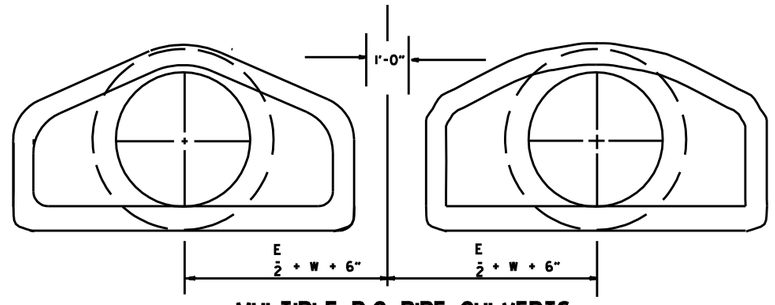
D. DIA.	GAUGE	A 1" ±	B. MAX.	H 1" ±	L 1½" ±	W 2" ±	S
		INCHES					
12	16	6	6	6	21	24	2½sl
15	16	7	8	6	26	30	2½sl
18	16	8	10	6	31	36	2½sl
21	16	9	12	6	36	42	2½sl
24	16	10	13	6	41	48	2½sl
30	14	12	16	8	51	60	2½sl
36	14	14	19	9	60	72	2½sl
42	12	16	22	11	69	84	2½sl
48	12	18	27	12	78	90	2½sl
54	12	18	30	12	84	102	2sl
60	12	18	33	12	87	114	1½sl
66	12	18	36	12	87	120	1½sl
72	12	18	39	12	87	126	1 1/3sl

C.M. ARCH PIPE

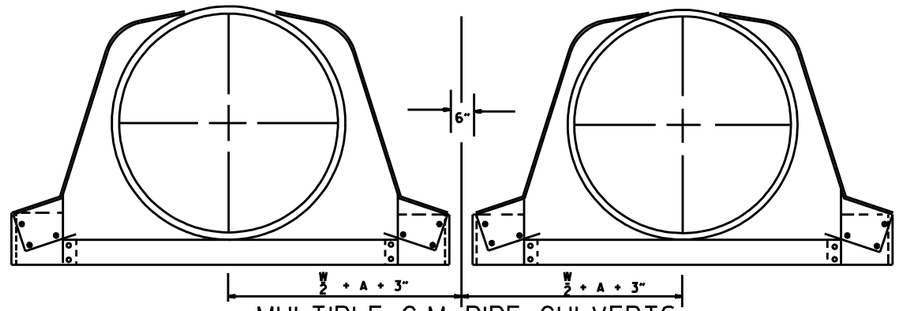
EQUIV. DIA.	SPAN	RISE	A 1" ±	B MAX.	H 1" ±	L 1½" ±	W 2" ±	S	GAUGE
	INCHES								
15"	17	13	7	9	6	19	30	2½sl	16
18"	21	15	7	10	6	23	36	2½sl	16
21"	24	18	8	12	6	28	42	2½sl	16
24"	28	20	9	14	6	32	48	2½sl	16
30"	35	24	10	16	6	39	60	2½sl	14
36"	42	29	12	18	8	46	75	2½sl	14
42"	49	33	13	21	9	53	85	2½sl	12
48"	57	38	18	26	12	63	90	2½sl	12
54"	64	43	18	30	12	70	102	2½sl	12
60"	71	47	18	33	12	77	114	2½sl	12

NOTE: ALTERNATE CONNECTIONS TO THE PIPE CULVERTS, IN ACCORDANCE WITH MANUFACTURER'S STANDARD PRACTICES, MAY BE MADE SUBJECT TO THE APPROVAL OF THE ENGINEER.

END SECTIONS FOR CORRUGATED METAL PIPE CULVERTS



MULTIPLE R.C. PIPE CULVERTS



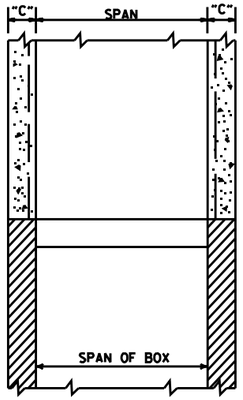
MULTIPLE C.M. PIPE CULVERTS

DATE	REVISION	FILMED
10-18-96	REVISED ASTM REF. TO AASHTO	
5-15-80	REVISED DISTANCE BETWEEN MULTIPLE R.C.P. F.E.S.	664-5-15-80
7-14-78	C.M. ARCH SIZES TO CONFORM WITH AASHTO SIZES	752-7-14-78
8-22-75	ADDED MULTIPLE PIPE CULVERTS	517-8-22-75
12-5-74	REMOVED NOTE RE REINF. FOR R.C. F.E.S.	500-12-5-74
5-24-73	CMP END SECTION, SHOW PIPE PAY LENGTH	627-5-24-73
10-2-72	REVISED AND REDRAWN	760-10-2-72

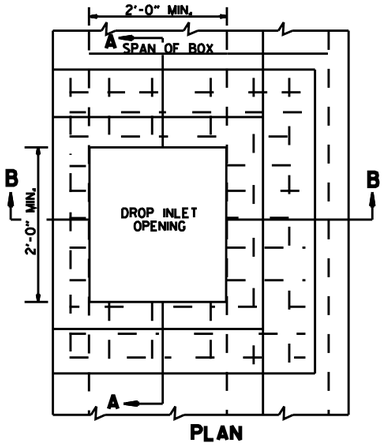
ARKANSAS STATE HIGHWAY COMMISSION

FLARED END SECTION

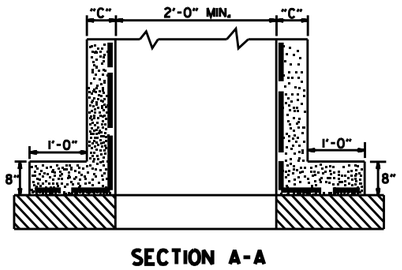
STANDARD DRAWING FES-2



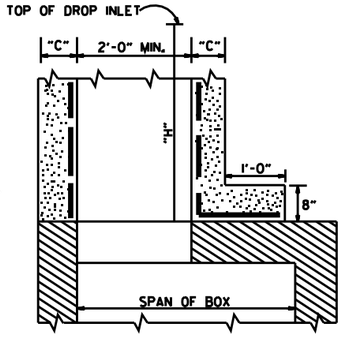
SECTION B-B



PLAN

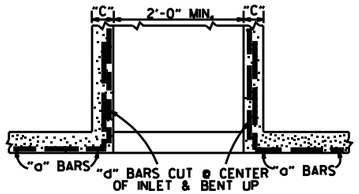


SECTION A-A

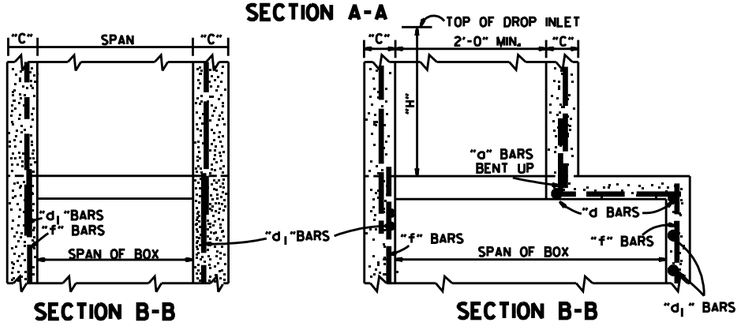


SECTION B-B

METHOD OF CONSTRUCTING DROP INLET ON EXISTING R.C. BOX CULVERT



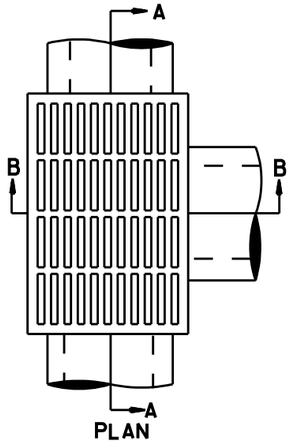
SECTION A-A



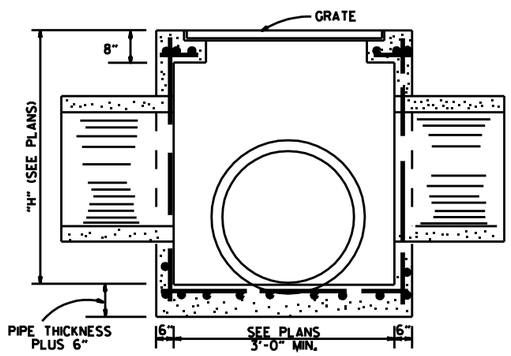
SECTION B-B SECTION B-B

METHOD OF CONSTRUCTING DROP INLET ON NEW R.C. BOX CULVERT

NOTE: "C" DIMENSIONS AND REINFORCING BAR SIZES, SHALL CONFORM TO THOSE SHOWN ON STANDARD DRAWING FOR DROP INLET.

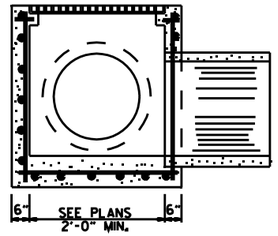


PLAN



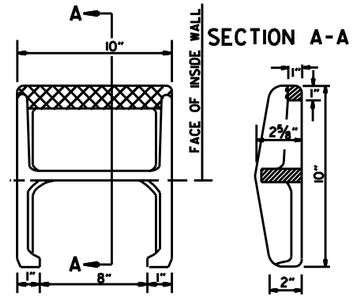
SECTION A-A

NOTE: REINF. BARS TO BE #4 BARS ON 6" CTRS. WITH 1½" MIN. COVER. THIS TYPE DROP INLET TO BE USED WHERE NOT SUBJECTED TO TRAFFIC.



SECTION B-B

DROP INLET (TYPE E)



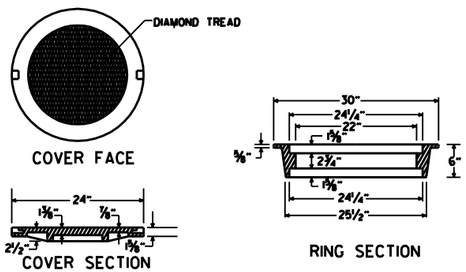
SECTION A-A

APPROX. WEIGHT = 11 LBS. (CAST IRON)

PLAN

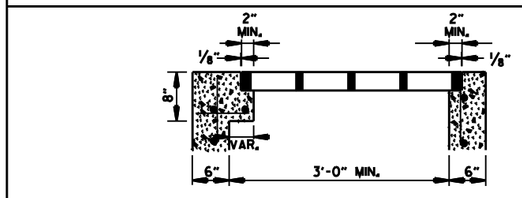
NOTE: THIS DETAIL IS TYPICAL. OTHERS MAY BE USED WITH PRIOR APPROVAL OF THE ENGINEER.

DETAIL OF STEP FOR DROP INLET

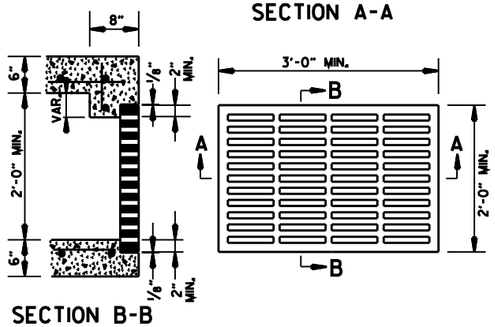


APPROXIMATE TOTAL WEIGHT = 333 LBS.

HEAVY DUTY RING & COVER



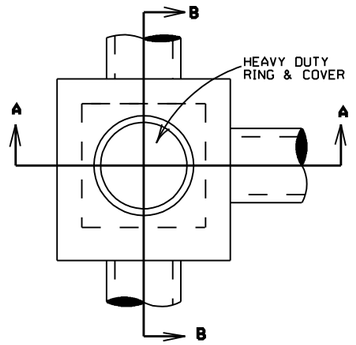
SECTION A-A



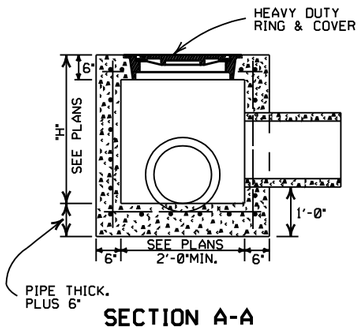
SECTION B-B

APPROXIMATE MINIMUM WATERWAY OPENING = 260 SQ. IN.

GRATE FOR TYPE E DROP INLET

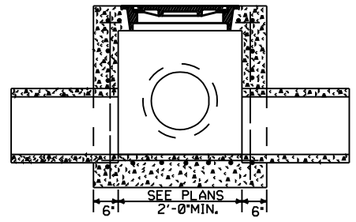


PLAN



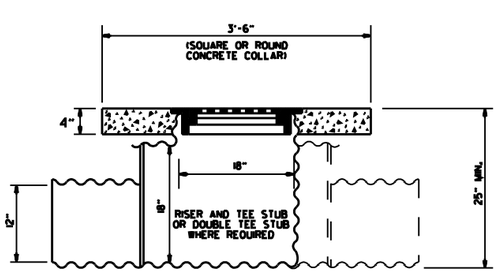
SECTION A-A

NOTE: REINF. BARS TO BE #4 BARS ON 6" CTRS. WITH 1½" MIN. COVER. THIS TYPE JUNCTION BOX TO BE USED WHERE NOT SUBJECTED TO TRAFFIC.

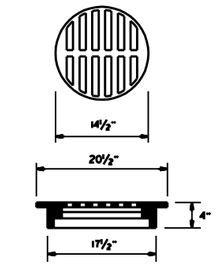


SECTION B-B

JUNCTION BOX (TYPE E)



NOTE: CONCRETE COLLAR TO BE CAST IN PLACE. 12" PIPE CULVERTS TO BE MEASURED AND PAID FOR AS " 12" SIDE DRAIN ".



USE NEENAH R-5901-C OR EQUIVALENT BICYCLE SAFE FRAME AND GRATE

DETAIL OF YARD DRAIN

GENERAL NOTES:

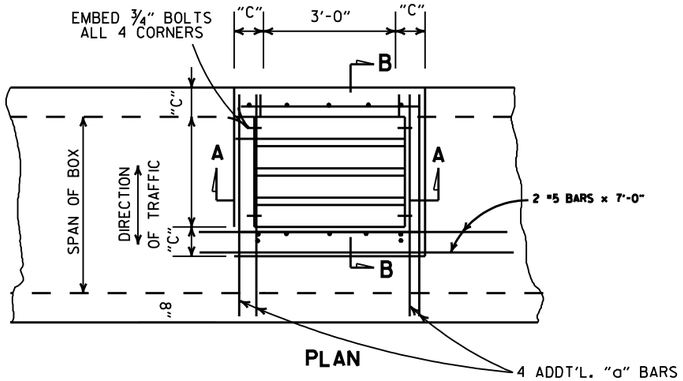
1. ALL EXPOSED CORNERS SHALL BE ¾" CHAMFERED.
2. STEPS SHALL BE INSTALLED ON 16" CENTERS ON ALL INLETS 4'-0" HIGH OR OVER, OR AS APPROVED BY THE ENGINEER.
3. EXPANSION JOINT MATERIAL SHALL BE ¾" PREFORMED FIBER.
4. GRATE OR GRATE AND FRAME SHALL BE CONSTRUCTED OF CAST IRON AND SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR GRAY IRON CASTINGS AASHTO M 105 CLASS 35B. GRATE MAY BE USED WITHOUT FRAME.
5. GRATE AND FRAME SHALL NOT BE PAINTED.
6. GRATE SHALL BE BICYCLE SAFE.
7. HEAVY DUTY RING SHALL ALWAYS BE INSTALLED WITH FLANGE ON TOP.
8. HEAVY DUTY RING AND COVER SHALL BE CONSTRUCTED OF CAST IRON AND SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR GRAY IRON CASTINGS AASHTO M105 CLASS 35B & AASHTO M306.
9. HEAVY DUTY RING AND COVER SHALL NOT BE PAINTED.
10. DIMENSIONS SHOWN FOR RING AND COVER ARE TYPICAL. THE CONTRACTOR MAY SUBSTITUTE SIMILAR CASTINGS WITH THE APPROVAL OF THE ENGINEER. REQUESTING APPROVAL FOR CASTING DESIGNS MAY BE MADE BY REFERRING TO PREVIOUSLY APPROVED DRAWINGS.

DATE REV.	REVISION	DATE FILMED
11-16-01	ADDED NOTE 10	
1-12-00	REVISED HEAVY DUTY RING & COVER	
7-02-98	CHANGED GRATE DETAIL, DELETED DI(TYPE D), REPLACED RING & COVER W/HEAVY DUTY RING & COVER, ADDED JUNCTION BOX (TYPE E)	
6-26-97	ADDED DIMENSION TO TYPE IV-A	
10-18-96	ADDED DETAIL OF YARD DRAIN	
8-15-91	DELETE TYPE IV GRATE	
7-15-88	REVISED STEP DETAIL	
5-20-83	REVISED DETAILS OF GRATES (TYPE IV & IV-A)	
2-4-83	ADDED GENERAL NOTE NO. 4	
3-2-81	ADDED TYPE IV-A GRATE	
5-22-74	DELETED INLET (TYPE F) & GRATE (TYPE III)	
10-2-72	REVISED AND REDRAWN	

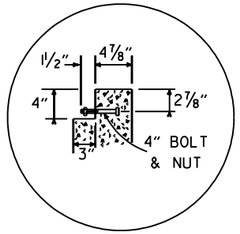
ARKANSAS STATE HIGHWAY COMMISSION

DETAILS OF DROP INLETS & JUNCTION BOXES

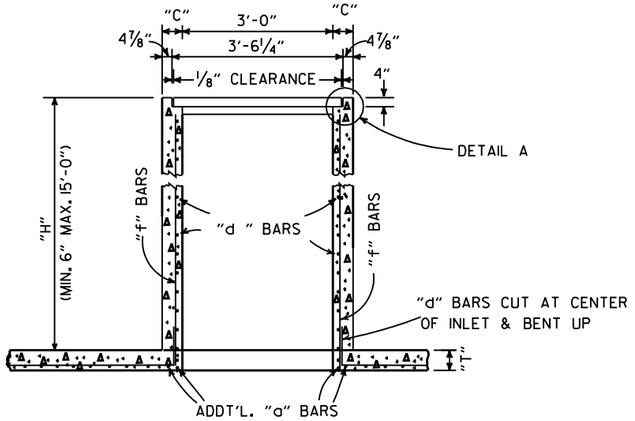
STANDARD DRAWING FPC-9



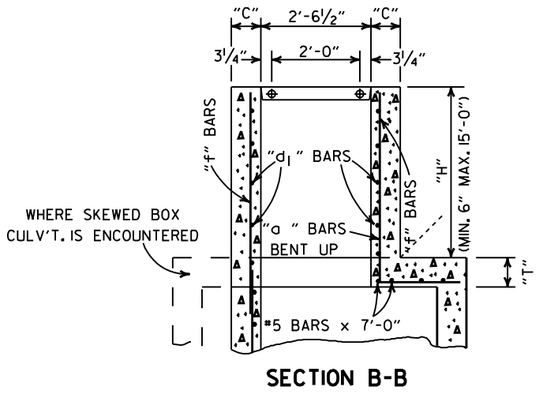
PLAN



DETAIL A



SECTION A-A

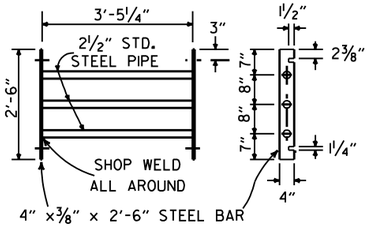


SECTION B-B

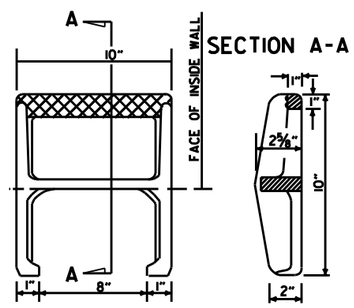
NOTE: ADDT'L.REINF. STEEL TO BE INCLUDED IN UNIT PRICE BID PER TYPE "TM" D.I.

DIMENSIONS & REINF. BARS FOR D.I. TO BE THE SAME AS THOSE SHOWN ON APPLICABLE STD. BARREL DRAWING FOR R.C. BOX CULVERTS.

DROP INLET TYPE "TM"
FOR REINFORCED CONC. BOX CULVERTS



GRATE DETAIL



APPROX. WEIGHT = 11 LBS. (CAST IRON)

PLAN

NOTE: THIS DETAIL IS TYPICAL. OTHERS MAY BE USED WITH PRIOR APPROVAL OF THE ENGINEER.

DETAIL OF STEP FOR DROP INLET

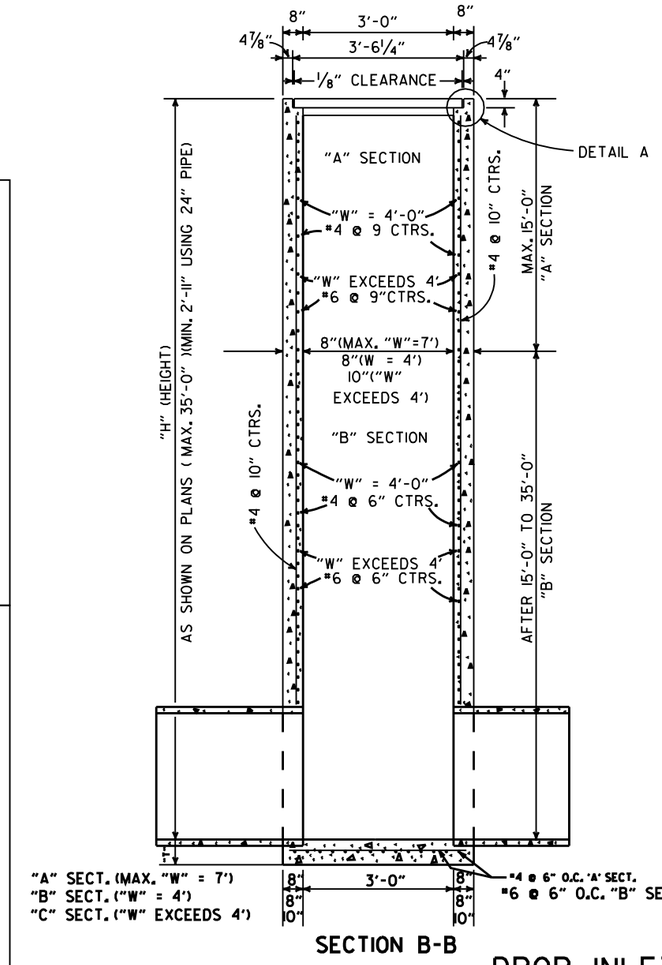
GENERAL NOTES:

1. STEEL PIPE FOR GRATES AND BOLTS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 807. BOLTS SHALL CONFORM TO ONE OF THE FOLLOWING: ASTM A193, GRADE B8 CLASS 1 OR 2, ASTM A307 OR AASHTO M 164.
2. STEEL PIPE FOR GRATES SHALL BE "STANDARD WEIGHT" PIPE CONFORMING TO ASTM A53 NATIONAL STANDARD PIPE.
3. BOLTS, NUTS, WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO M 232 OR AASHTO M 298, CLASS 40 OR 50.
4. ALL EXPOSED CORNERS TO HAVE ¾" CHAMFER.
5. ALL #4 AND #5 REINFORCING BARS TO HAVE 1½" COVER. LARGER SIZES TO HAVE 2" COVER.
6. THE COMPLETE PIPE GRATE SHALL BE PAINTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

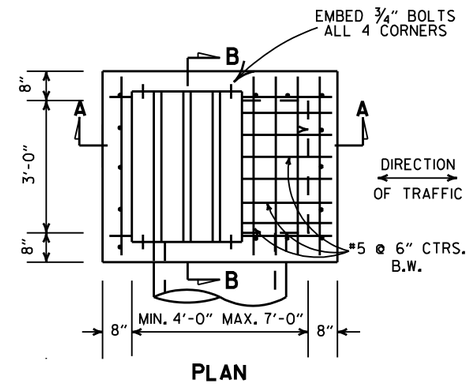
TABLE OF "W" DIMENSIONS

I.D. PIPE	SKEW OF CROSS DRAIN		
	STRAIGHT	30°	45°
	"W"	"W"	"W"
24"	4'-0"	4'-0"	4'-0"
30"	4'-0"	4'-0"	4'-5"
36"	4'-0"	4'-3"	5'-3"
42"	4'-3"	4'-11"	6'-1"
48"	4'-10"	5'-7"	6'-11"

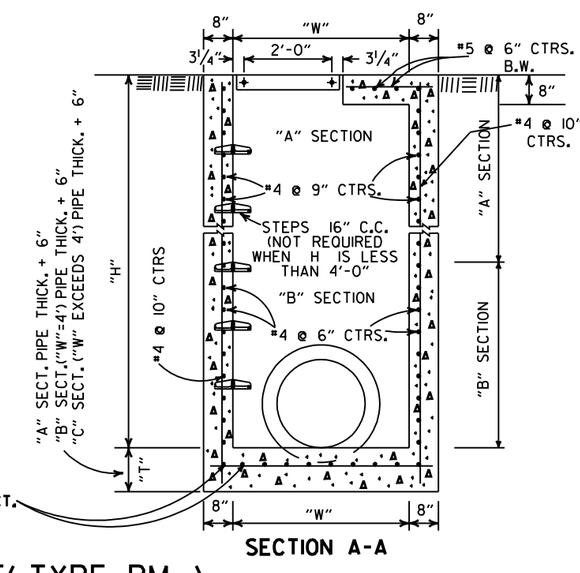
NOTE: DIMENSIONS SHOWN ABOVE ARE FOR PIPES INTERSECTING DROP INLET ON ONE SIDE ONLY. FOR SKEWED PIPES INTERSECTING BOTH SIDES OF DROP INLET, "W" WILL NEED TO BE INCREASED OR AXIS OF INTERSECTING PIPES WILL NEED TO BE SHIFTED.



SECTION B-B



PLAN



SECTION A-A

DROP INLET(TYPE RM)

REVISED		DATE FILMED
8-22-02	ADDED & REVISED DIMENSION TO SECTION A-A	
1-12-00	CORRECTED DIMENSION ON SECTION B-B	
11-06-97	ADDED DIMENSION TO SECTION A-A	
10-18-96	REVISED ASTM REF. TO AASHTO AND ADDED NOTE TO TABLE OF "W" DIMENSIONS	
10-1-92	ADDED DIRECTION OF TRAFFIC	10-1-92
8-15-91	ADDED NOTE ABOUT PAINTING OF GRATE	8-15-91
11-30-89	ALTERED DETAIL A	11-30-89
7-15-88	REVISED STEP DETAIL, TM & RM D.I. & GRATE DETAIL	719-7-15-88
10-2-72	REVISED AND REDRAWN	542-10-2-72

ARKANSAS STATE HIGHWAY COMMISSION

DETAILS OF DROP INLETS

STANDARD DRAWING FPC-9D

4'-0" LENGTH DROP INLET — DROP INLET EXTENSION

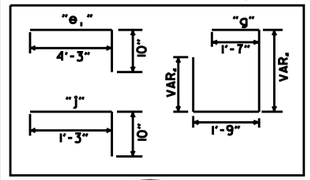
PIPE SIZE	MIN. WIDTH	HEIGHT 5'-0" CLASS A CONC. CU. YDS.	HEIGHT 5'-0" REINF. STEEL POUNDS	PLUS OR MINUS PER LIN. FT. OF HEIGHT CLASS A CONC. CU. YDS.	PLUS OR MINUS PER LIN. FT. OF HEIGHT REINF. STEEL POUNDS	4'-0" CLASS A CONC. CU. YDS.	4'-0" REINF. STEEL POUNDS	8'-0" CLASS A CONC. CU. YDS.	8'-0" REINF. STEEL POUNDS
18"	2'-6"	1.77	156	0.28	22	0.58	38	0.87	72
24"	2'-6"	1.79	156	0.28	22				
30"	3'-2"	2.39	205	0.30	26				
36"	3'-8"	2.63	236	0.32	28				
42"	4'-4"	2.95	250	0.34	30	DEDUCT FROM QUANTITY COMPUTED FOR EACH EXTENSION ADDED.			
48"	4'-10"	3.21	265	0.36	32				
						0.04	3		

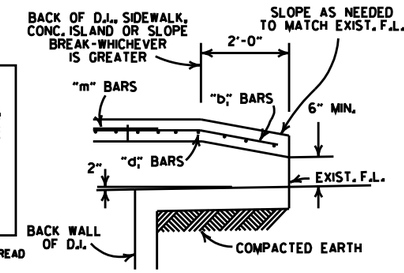
NOTE: QUANTITIES ARE APPROXIMATE AND ARE SHOWN FOR BIDDER INFORMATION ONLY.

DEDUCT FROM QUANTITY COMPUTED FOR EACH PIPE ENTERING INLET

INSIDE DIA. PIPE	CLASS A CONC.	REINF. STEEL
INCHES	CU. YDS.	POUNDS
18	0.05	2
24	0.09	3
30	0.13	4
42	0.24	8

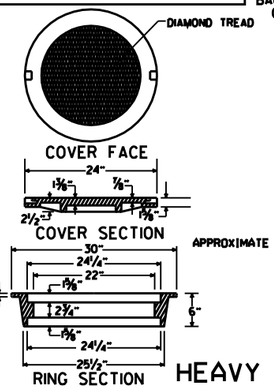
BAR DIAGRAM



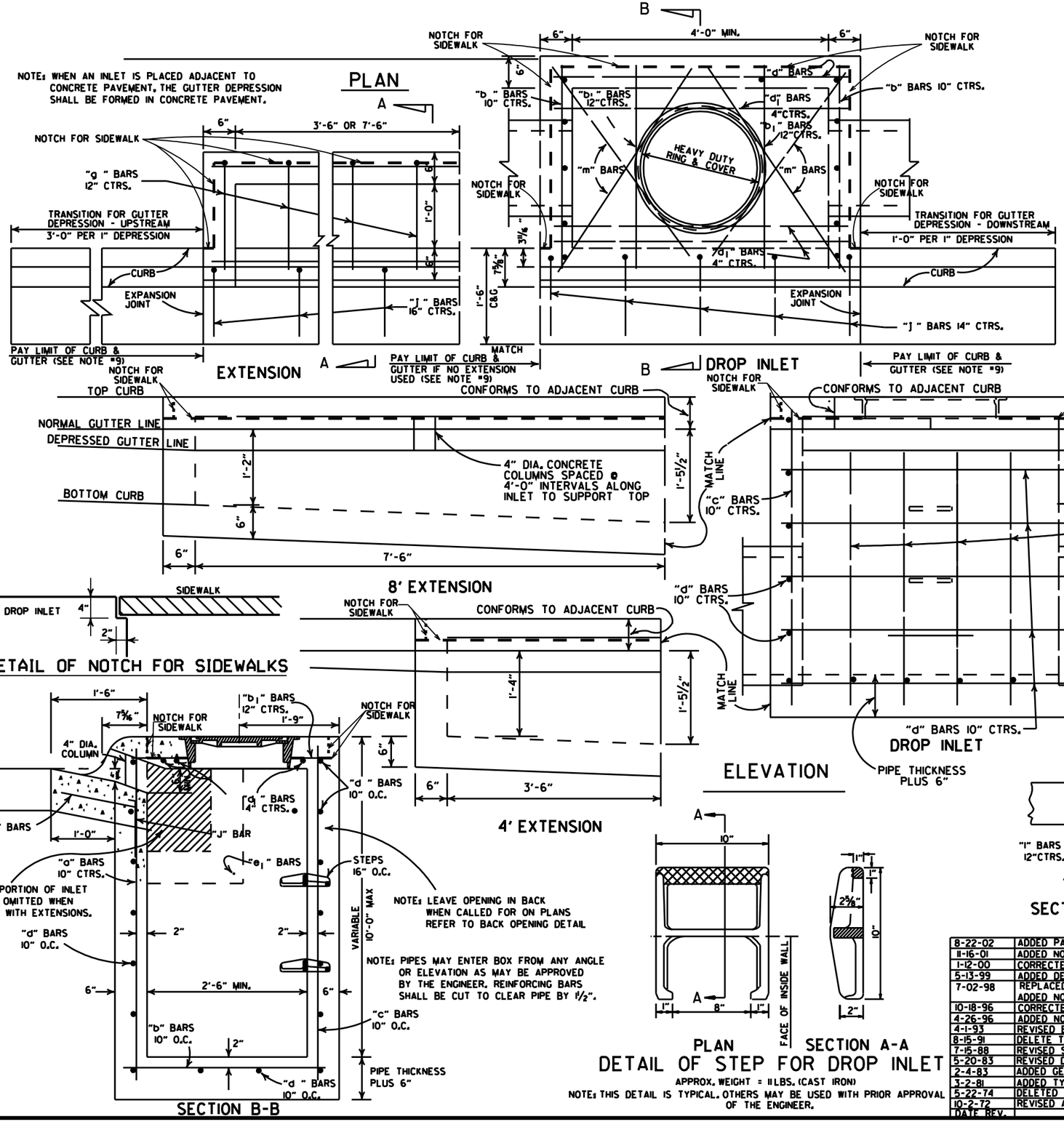


BACK OPENING

WHEN OPENING IN BACK IS CALLED FOR ON PLANS EXTEND OPENING AS SHOWN IN DETAIL. PAYMENT TO BE INCLUDED IN PRICE BID FOR DROP INLET (TYPE C).



HEAVY DUTY RING & COVER



GENERAL NOTES:
1. ALL EXPOSED CORNERS TO HAVE ¾" CHAMFER.
2. STEPS SHALL BE INSTALLED IN ALL INLETS 4'-0" HIGH AND OVER OF AS APPROVED BY THE ENGINEER.
3. ALL REINF. BARS SHALL BE #4 AND HAVE 1½" COVER.
4. DROP INLETS AND EXTENSION ON CURVED SECTIONS SHALL CONFORM TO THE CURVATURE OF THE CURB.
5. THIS DROP INLET MAY BE CONSTRUCTED ON NEW OR EXISTING R.C. BOX CULVERT AS SHOWN ON F.P.C.-9.
6. WHEN PLANS CALL FOR DROP INLET OVER 10'-0" HIGH, FLOOR AND WALLS SHALL BE CONSTRUCTED AS SHOWN FOR TYPE "RM" DROP INLET (F.P.C.-9D).
7. HEAVY DUTY RING SHALL ALWAYS BE INSTALLED WITH FLANGE ON TOP.
8. DURING CONSTRUCTION OF THE ROADWAY THE CONTRACTOR SHALL MAINTAIN DRAINAGE INTO OR AROUND THE DROP INLET AS APPROVED BY THE ENGINEER.
9. PAYMENT FOR CURB AND/OR CURB AND GUTTER WITHIN THE LIMITS OF DROP INLETS AND DROP INLET EXTENSIONS SHALL BE CONSIDERED INCLUDED IN PAYMENT MADE FOR DROP INLETS AND/OR DROP INLET EXTENSIONS.
10. HEAVY DUTY RING AND COVER SHALL BE CONSTRUCTED OF CAST IRON AND SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR GRAY IRON CASTINGS AASHTO M105 CLASS 35B & AASHTO M306.
11. HEAVY DUTY RING AND COVER SHALL NOT BE PAINTED.
12. 4"x2" NOTCH SHALL BE FORMED IN ALL DROP INLETS TO SUPPORT SIDEWALK CONSTRUCTION, REFER TO DETAIL OF NOTCH FOR SIDEWALKS.
13. DIMENSIONS SHOWN FOR RING AND COVER ARE TYPICAL. THE CONTRACTOR MAY SUBSTITUTE SIMILAR CASTINGS WITH THE APPROVAL OF THE ENGINEER. REQUESTING APPROVAL FOR CASTING DESIGNS MAY BE MADE BY REFERRING TO PREVIOUSLY APPROVED DRAWINGS.

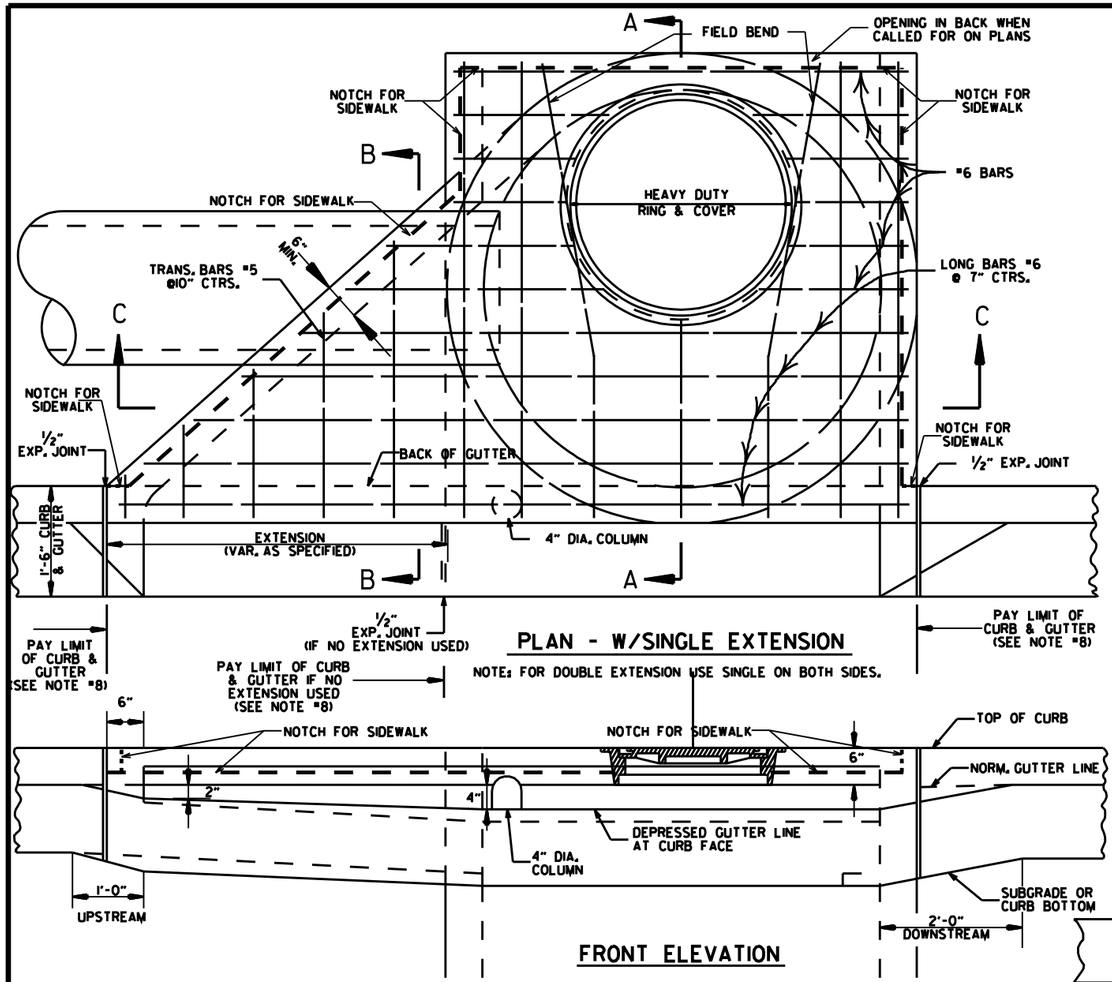
DATE REV.	REVISION	DATE FILMED
8-22-02	ADDED PAY LIMIT CURB NOTES TO SECTIONS A-A & B-B	
11-16-01	ADDED NOTE 13; REVISED SECTION B-B	
1-12-00	CORRECTED DIMENSION ON SECTION B-B & REVISED RING & COVER	
5-13-99	ADDED DETAIL OF NOTCH FOR SIDEWALKS	
7-02-98	REPLACED RING & COVER W/HEAVY DUTY RING & COVER ADDED NOTES 9,10,&11	
10-18-96	CORRECTED SPELLING	
4-26-96	ADDED NOTE 8 & REVISED (4')X(8') EXTENSION TITLES	10-18-96
4-1-93	REVISED BACK OPENING & NOTE	
8-15-91	DELETE TYPE IV GRATE	
7-15-88	REVISED STEP DETAIL	
5-20-83	REVISED DETAILS OF GRATES (TYPE IV & IV-A)	
2-4-83	ADDED GENERAL NOTE NO. 4	
3-2-81	ADDED TYPE IV-A GRATE	
5-22-74	DELETED INLET (TYPE F) & GRATE (TYPE III)	
10-2-72	REVISED AND REDRAWN	

ARKANSAS STATE HIGHWAY COMMISSION

DETAILS OF DROP INLETS

(TYPE C)

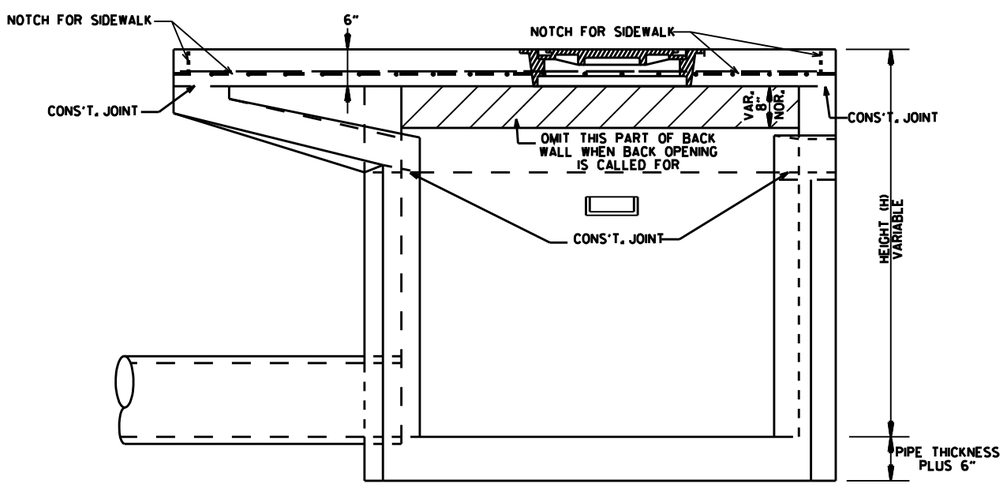
STANDARD DRAWING FPC-9E



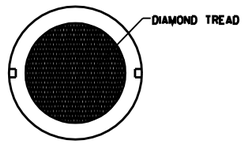
PLAN - W/SINGLE EXTENSION

NOTE: FOR DOUBLE EXTENSION USE SINGLE ON BOTH SIDES.

FRONT ELEVATION



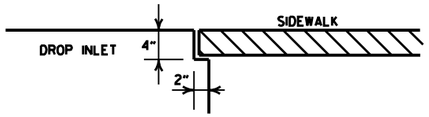
SECTION C-C



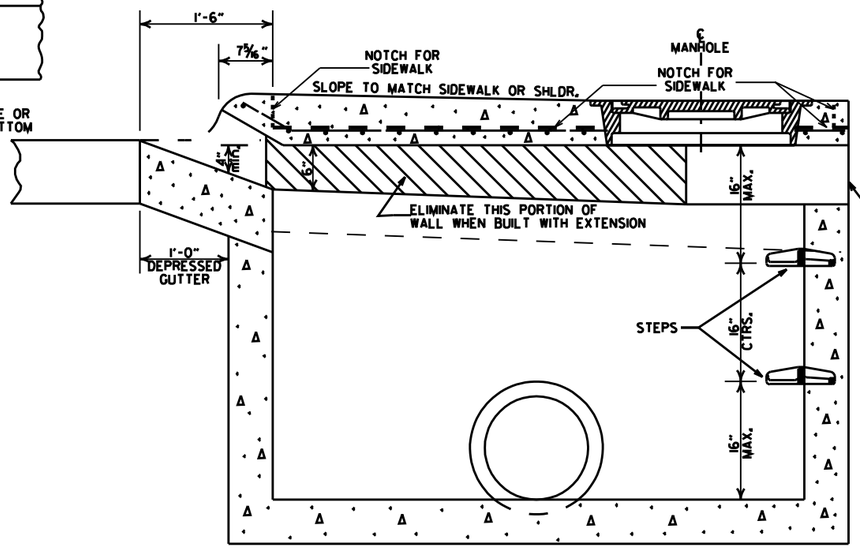
APPROXIMATE TOTAL WEIGHT = 333 LBS.

HEAVY DUTY RING & COVER

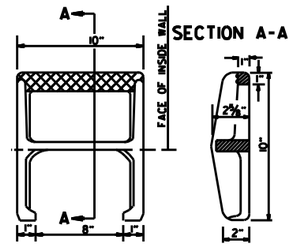
1. HEAVY DUTY RING AND COVER SHALL BE CONSTRUCTED OF CAST IRON AND SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR GRAY IRON CASTINGS AASHTO M105 CLASS 35B & AASHTO M306.
2. HEAVY DUTY RING AND COVER SHALL NOT BE PAINTED.
3. HEAVY DUTY RING SHALL ALWAYS BE INSTALLED WITH FLANGE ON TOP.



DETAIL OF NOTCH FOR SIDEWALKS



SECTION A-A

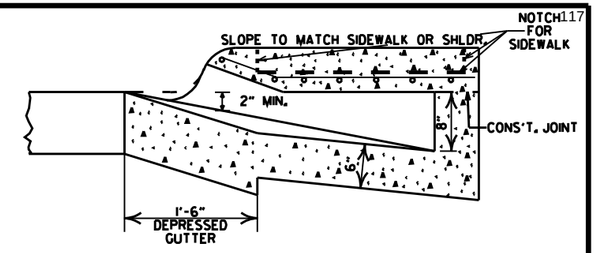


APPROX. WEIGHT = 11 LBS. (CAST IRON)

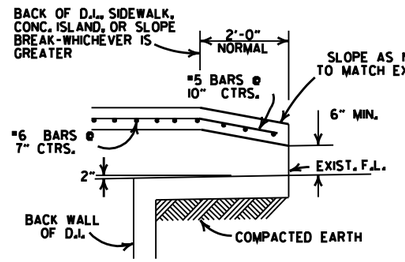
PLAN

NOTE: THIS DETAIL IS TYPICAL, OTHERS MAY BE USED WITH PRIOR APPROVAL OF THE ENGINEER.

DETAIL OF STEP FOR DROP INLET



SECTION B-B



BACK OPENING

WHEN OPENING IN BACK IS CALLED FOR ON PLANS EXTEND OPENING AS SHOWN IN DETAIL. PAYMENT TO BE INCLUDED IN PRICE BID FOR DROP INLET (TYPE MO).

GENERAL NOTES:

1. ALL EXPOSED CORNERS TO HAVE 3/4" CHAMFER.
2. STEPS SHALL BE INSTALLED IN ALL INLETS 4'-0" HIGH AND OVER OR AS DIRECTED BY THE ENGINEER.
3. ALL REINFORCING BARS SHALL BE GRADE 60 AND HAVE MIN. 1 1/2" COVER.
4. DROP INLETS AND EXTENSION ON CURVED SECTIONS SHALL CONFORM TO THE CURVATURE OF THE CURB.
5. 4" DIA. COLUMNS SPACED AT MAX. 4'-0" INTERVALS SHALL BE INSTALLED ALONG INLET AND EXTENSION TO SUPPORT TOP.
6. BASE AND INLET WALLS SHALL BE CAST MONOLITHICALLY.
7. THE THROAT SHALL BE CAST INTEGRALLY WITH THE GUTTER.
8. PAYMENT FOR CURB AND/OR CURB AND GUTTER WITHIN THE LIMITS OF DROP INLETS AND DROP INLET EXTENSIONS SHALL BE CONSIDERED INCLUDED IN PAYMENT MADE FOR DROP INLETS AND/OR DROP INLET EXTENSIONS.
9. PIPES MAY ENTER DROP INLET FROM ANY ANGLE OR ELEVATION AS MAY BE APPROVED BY THE ENGINEER.
10. APPROPRIATE SIZE TYPE C DROP INLETS MAY BE SUBSTITUTED FOR TYPE MO DROP INLETS AS APPROVED BY THE ENGINEER. PAYMENT TO BE AS DROP INLET (TYPE MO).
11. DURING CONSTRUCTION OF THE ROADWAY THE CONTRACTOR SHALL MAINTAIN DRAINAGE INTO OR AROUND THE DROP INLET AS APPROVED BY THE ENGINEER.
12. 4"x2" NOTCH SHALL BE FORMED IN ALL DROP INLETS TO SUPPORT SIDEWALK CONSTRUCTION. REFER TO DETAIL OF NOTCH FOR SIDEWALKS.
13. DIMENSIONS SHOWN FOR RING AND COVER ARE TYPICAL. THE CONTRACTOR MAY SUBSTITUTE SIMILAR CASTINGS WITH THE APPROVAL OF THE ENGINEER. REQUESTING APPROVAL FOR CASTING DESIGNS MAY BE MADE BY REFERRING TO PREVIOUSLY APPROVED DRAWINGS.

LEAVE OPENING IN BACK WHEN CALLED FOR ON PLANS REFER TO BACK OPENING DETAIL

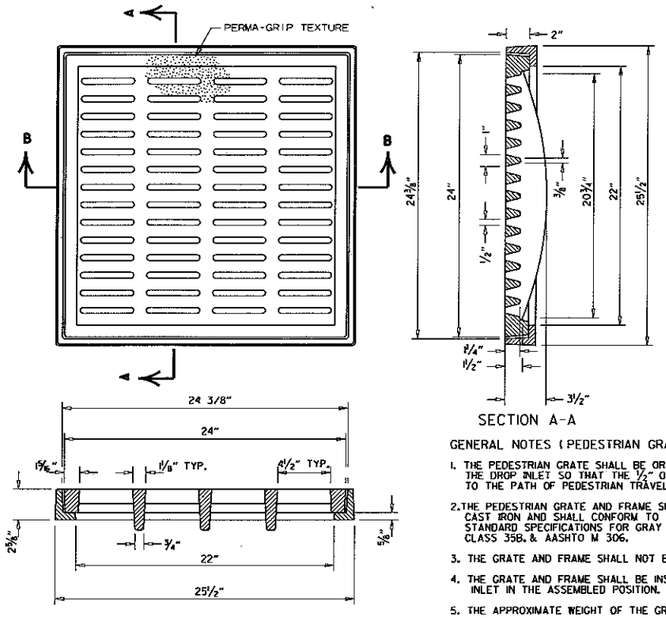
DIA. OF D.I.	DIA. OF OUTLET PIPE	MINIMUM WALL THICKNESS	
		CAST IN PLACE	PRECAST
4' I.D.	12" THRU 27"	6"	5"
5' I.D.	30" THRU 42"	8"	6"
6' I.D.	48" THRU 54"	8"	7"

DATE	REVISIONS	DATE FILMED
8-22-02	ADDED PAY LIMIT CURB NOTES TO SECTIONS A-A & B-B	
11-16-01	ADDED NOTE 13	
1-12-00	REVISED HEAVY DUTY RING & COVER	
5-13-99	ADDED NOTCH DETAIL FOR SIDEWALKS	
7-02-98	REP. NOTE 8, REV. PLAN DET., REV. PICTURE FOR NEW RING & COVER, ADDED HEAVY DUTY RING & COVER AND DETAIL OF STEP FOR DROP INLET	
4-26-96	ADDED NOTE 11 & ADJ. OPENING DIMENSION	
10-12-95	CORRECTED *5 BAR SPACING	
7-20-95	CORRECTED DIAMETER OF D.I. IN BOX	
2-2-95	TYPE C TO MO (OPEN BACK DETAIL)	
11-1-94	REVISED GENERAL NOTES	11-1-94
4-1-93	REV BACK OPEN DETAIL & NOTE	4-1-93
8-14-91	REVISED NOTES 11,12 & ADDED BK.OPEN DETAIL	8-14-91
11-20-89	ADDED NOTE NO.12	11-20-89
4-21-89	ADDED NOTE 6 & MINIMUM WALL THICKNESS	4A-4-21-89
7-25-88	ADDED EXTEND NOTE TO SECTION A-A	6A9-7-25-88
1-14-87	MODIFIED WALL THICKNESS	783-1-14-87
6-12-87	ISSUED	4-6-12-87

ARKANSAS STATE HIGHWAY COMMISSION

DETAILS OF DROP INLET (TYPE MO)

STANDARD DRAWING FPC-9M



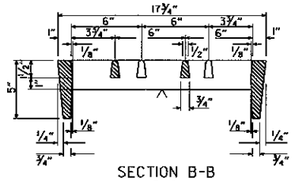
SECTION B-B

SECTION A-A

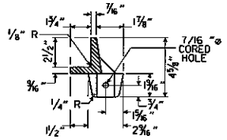
DETAILS OF PEDESTRIAN GRATE AND FRAME

GENERAL NOTES (PEDESTRIAN GRATE & FRAME)

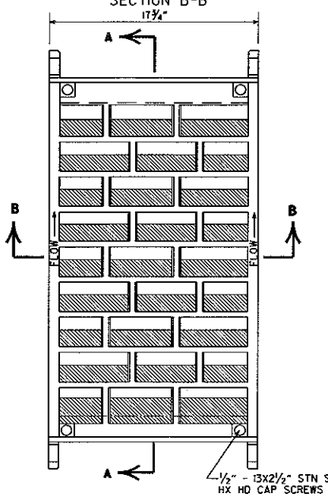
1. THE PEDESTRIAN GRATE SHALL BE ORIENTED IN THE TOP OF THE DROP INLET SO THAT THE ½" OPENINGS ARE PERPENDICULAR TO THE PATH OF PEDESTRIAN TRAVEL.
2. THE PEDESTRIAN GRATE AND FRAME SHALL BE CONSTRUCTED OF CAST IRON AND SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR GRAY IRON CASTINGS AASHTO M 105, CLASS 35B, & AASHTO M 306.
3. THE GRATE AND FRAME SHALL NOT BE PAINTED.
4. THE GRATE AND FRAME SHALL BE INSTALLED IN THE DROP INLET IN THE ASSEMBLED POSITION.
5. THE APPROXIMATE WEIGHT OF THE GRATE AND FRAME SHALL BE 211LBS.
6. THE MINIMUM WATERWAY OPENING SHALL BE 122 SQ. IN.

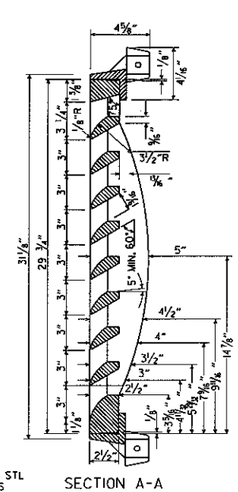


SECTION B-B



SECTION THRU FRAME



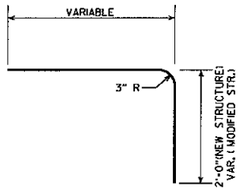


SECTION A-A

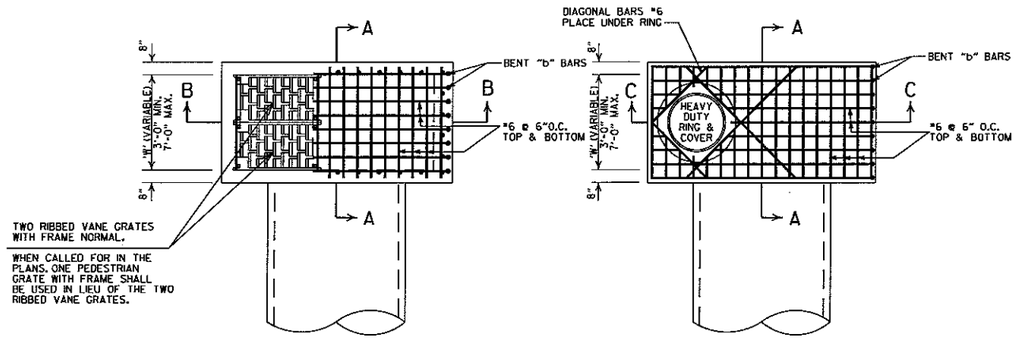
DETAILS OF RIBBED VANE GRATE AND FRAME

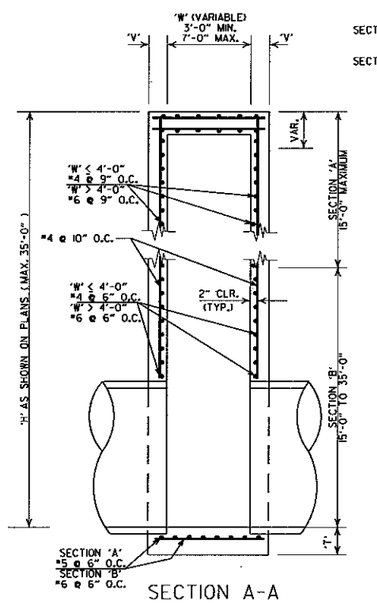
GENERAL NOTES (RIBBED VANE GRATE & FRAME)

1. RIBBED VANE GRATE AND FRAME SHALL BE CONSTRUCTED OF CAST IRON AND SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR GRAY IRON CASTINGS AASHTO M 105, CLASS 35B, & AASHTO M 306.
2. GRATE AND FRAME SHALL NOT BE PAINTED.
3. GRATE AND FRAME SHALL BE INSTALLED IN DROP INLET IN ASSEMBLED POSITION.
4. APPROXIMATE WEIGHT OF GRATE SHALL BE 170 LBS.



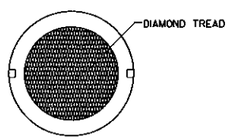
DETAIL OF BENT "b" BAR



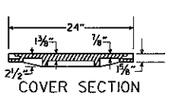


SECTION A-A

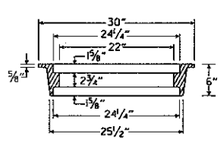
DETAILS OF DROP INLET (TYPE ST)



COVER FACE



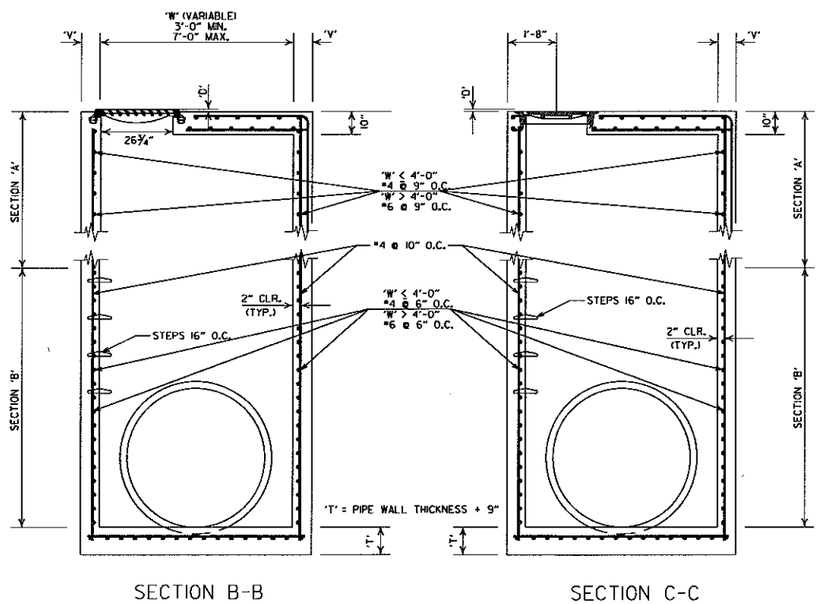
COVER SECTION



RING SECTION

HEAVY DUTY RING & COVER

APPROXIMATE TOTAL WEIGHT = 333 LBS.



SECTION B-B SECTION C-C

DETAILS OF JUNCTION BOX (TYPE ST)

GENERAL NOTES (TYPE ST DROP INLET & JUNCTION BOX)

1. THE 'D' DIMENSION SHALL MATCH THE FINAL LIFT OF ACHM SURFACE COURSE SHOWN IN THE PLANS WHEN ASPHALT PAVING SURROUNDS THE GRATE OR RING COVER, AND SHALL BE 0" AT OTHER INSTALLATIONS.
2. THE STEPS SHALL BE OMITTED WHERE 'H' IS LESS THAN 4'-0".
3. ALL EXPOSED CORNERS ARE TO HAVE A ¾" CHAMFER.

GENERAL NOTES (HEAVY DUTY RING & COVER):

1. HEAVY DUTY RING AND COVER SHALL BE CONSTRUCTED OF CAST IRON AND SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR GRAY IRON CASTINGS AASHTO M 105, CLASS 35B, & AASHTO M 306.
2. HEAVY DUTY RING AND COVER SHALL NOT BE PAINTED.
3. HEAVY DUTY RING SHALL ALWAYS BE INSTALLED WITH FLANGE ON TOP.
4. DIMENSIONS SHOWN FOR RING AND COVER ARE TYPICAL. THE CONTRACTOR MAY SUBSTITUTE SIMILAR CASTINGS WITH THE APPROVAL OF THE ENGINEER. REQUESTING APPROVAL FOR CASTING DESIGNS MAY BE MADE BY REFERRING TO PREVIOUSLY APPROVED DRAWINGS.

DATE REVISED	DATE FILMED	DESCRIPTION
7-26-12		REMOVED NOTE 4, REVISED 'T', REVISED BOTTOM SLAB REBAR FOR SECTION 'A', SHOWED REBAR CLEARANCE IN SECTIONS
11-16-01		ADDED NOTE 4
1-12-00		REVISED HEAVY DUTY RING & COVER
5-13-99		ADDED PEDESTRIAN FRAME & GRATE
7-02-98		REMOVED NOTE 5, REV. DIMENSIONS, ADDED HEAVY DUTY RING & COVER ADDED AASHTO REF. REVISED GRATE
10-18-96		REVISED ASTM REF. TO AASHTO
10-1-92		REVISED & REISSUED
8-15-91	8-15-91	REVISED & REISSUED

ARKANSAS STATE HIGHWAY COMMISSION

DETAILS OF DROP INLET & JUNCTION BOX (TYPE ST)

STANDARD DRAWING FPC-9S

REINFORCED CONCRETE ARCH PIPE DIMENSIONS

EQUIV. DIA.	SPAN		RISE	
	AASHTO M 206	AHTD NOMINAL	AASHTO M 206	AHTD NOMINAL
INCHES	INCHES			
15	18	18	11	11
18	22	22	13½	14
21	26	26	15½	16
24	28½	29	18	18
30	36¼	36	22½	23
36	43⅜	44	26⅝	27
42	51⅛	51	31⅝	31
48	58½	59	36	36
54	65	65	40	40
60	73	73	45	45
72	88	88	54	54
84	102	102	62	62
90	115	115	72	72
96	122	122	77½	77
108	138	138	87⅛	87
120	154	154	96⅞	97
132	168¾	169	106½	107

THE MEASURED SPAN AND RISE SHALL NOT VARY MORE THAN ± 2 PERCENT FROM THE VALUES SPECIFIED BY AASHTO M206.

REINFORCED CONCRETE HORIZONTAL ELLIPTICAL PIPE DIMENSIONS

EQUIV. DIA.	AASHTO M 207	
	SPAN	RISE
INCHES	INCHES	
18	23	14
24	30	19
27	34	22
30	38	24
33	42	27
36	45	29
39	49	32
42	53	34
48	60	38
54	68	43
60	76	48
66	83	53
72	91	58
78	98	63
84	106	68

THE MEASURED SPAN AND RISE SHALL NOT VARY MORE THAN ± 2 PERCENT FROM THE VALUES SPECIFIED BY AASHTO M207.

CONSTRUCTION SEQUENCE

1. PLACE STRUCTURAL BEDDING MATERIAL TO GRADE. DO NOT COMPACT.
2. INSTALL PIPE TO GRADE.
3. COMPACT STRUCTURAL BEDDING OUTSIDE THE MIDDLE THIRD OF THE PIPE.
4. PLACE AND COMPACT THE HAUNCH AREA UP TO THE MIDDLE OF THE PIPE.
5. COMPLETE BACKFILL ACCORDING TO SUBSECTION 606.03.(f)(1).

NOTE: HAUNCH AND STRUCTURAL BEDDING MATERIAL WILL NOT BE PAID FOR SEPARATELY, BUT COMPENSATION WILL BE CONSIDERED TO BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF CONCRETE PIPE.

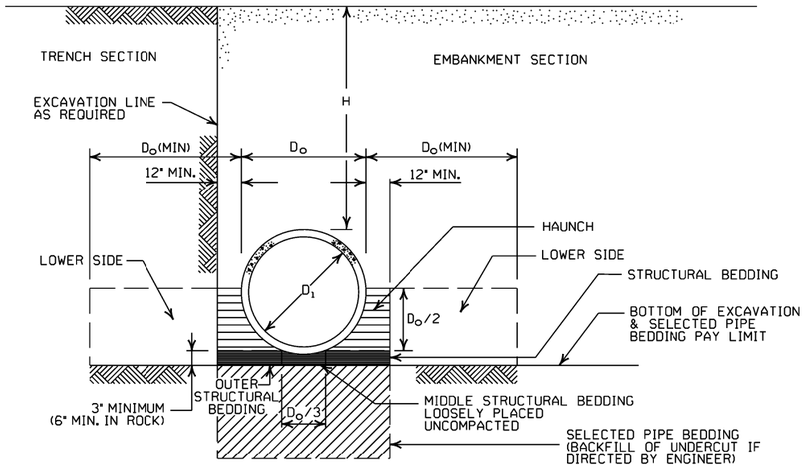
- LEGEND -

D_1 = NORMAL INSIDE DIAMETER OF PIPE
D_o = OUTSIDE DIAMETER OF PIPE
H = FILL COVER HEIGHT OVER PIPE (FEET)
MIN. = MINIMUM
= UNDISTURBED SOIL

INSTALLATION TYPE	MATERIAL REQUIREMENTS FOR HAUNCH AND STRUCTURAL BEDDING
TYPE 1	AGGREGATE BASE COURSE (CLASS 5 OR CLASS 7)
TYPE 2	SELECTED MATERIALS (CLASS SM-1, SM-2, OR SM-4) OR TYPE 1 INSTALLATION MATERIAL*
TYPE 3**	AASHTO CLASSIFICATION A-1 THRU A-6 SOIL OR TYPE 1 OR 2 INSTALLATION MATERIAL

* SM-3 WILL NOT BE ALLOWED.

** MATERIALS SHALL NOT INCLUDE ORGANIC MATERIALS OR STONES LARGER THAN 3 INCHES.



EMBANKMENT AND TRENCH INSTALLATIONS

1. MATERIAL IN THE HAUNCH AND OUTER STRUCTURAL BEDDING SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OR CLASS OF MATERIAL USED.
2. FOR TRENCHES WITH WALLS OF NATURAL SOIL, THE DENSITY OF THE SOIL IN THE LOWER SIDE ZONE SHALL BE AS FIRM AS THE 95% DENSITY REQUIRED FOR THE HAUNCH. IF THE EXISTING SOIL DOES NOT MEET THIS CRITERIA, IT SHALL BE REMOVED AND RECOMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OF MATERIAL USED.
3. FOR EMBANKMENTS, THE MATERIAL IN THE LOWER SIDE ZONE SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OR CLASS OF MATERIAL USED.

GENERAL NOTES

1. CONCRETE PIPE CULVERT CONSTRUCTION SHALL CONFORM TO ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION), WITH APPLICABLE SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS. UNLESS OTHERWISE NOTED IN THE PLANS, SECTION AND SUBSECTION REFER TO THE STANDARD CONSTRUCTION SPECIFICATIONS.
2. CONCRETE PIPE CULVERT DESIGN SHALL CONFORM TO AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, FIFTH EDITION (2010) WITH 2010 INTERIMS.
3. ALL PIPE SHALL CONFORM TO SECTION 606. CIRCULAR R.C. PIPE CULVERTS SHALL CONFORM TO AASHTO M170, R.C. ARCH PIPE CULVERTS SHALL CONFORM TO AASHTO M206 AND HORIZONTAL ELLIPTICAL PIPE CULVERTS SHALL CONFORM TO AASHTO M207.
4. ALL PIPE SHALL BE PROTECTED DURING CONSTRUCTION BY A COVER SUFFICIENT TO PREVENT DAMAGE FROM PASSAGE OF EQUIPMENT.
5. THE MINIMUM TRENCH WIDTH SHALL BE THE OUTSIDE DIAMETER OF THE PIPE PLUS 24 INCHES. THE MAXIMUM ALLOWABLE TRENCH WIDTH SHALL BE THE MINIMUM WIDTH PRACTICABLE FOR WORKING CONDITIONS.
6. MULTIPLE PIPE CULVERTS SHALL BE INSTALLED WITH A MINIMUM CLEARANCE OF 24 INCHES BETWEEN STRINGS OF PIPE. REFER TO STD. DWG. FES-2 FOR MINIMUM CLEARANCE WHERE FLARED END SECTIONS ARE USED.
7. IMPERVIOUS MATERIAL SHOULD BE PLACED AS DIRECTED BY THE ENGINEER AT THE ENDS OF THE CULVERT TO PREVENT LOSS OF STRUCTURAL BEDDING WHEN PERVIOUS MATERIAL IS USED FOR STRUCTURAL BEDDING AND/OR BACKFILL.
8. NOT MORE THAN ONE LIFTING HOLE MAY BE PROVIDED IN CONCRETE PIPE TO FACILITATE HANDLING. HOLE MAY BE CAST IN PLACE, CUT INTO THE FRESH CONCRETE AFTER FORMS ARE REMOVED, OR DRILLED. THE HOLE SHALL NOT BE MORE THAN TWO INCHES IN DIAMETER OR TWO INCHES SQUARE. CUTTING OR DISPLACEMENT OF REINFORCEMENT WILL NOT BE PERMITTED. SPALLED AREAS AROUND THE HOLE SHALL BE REPAIRED IN A WORKMANLIKE MANNER. LIFTING HOLE SHALL BE FILLED WITH MORTAR, CONCRETE, OR OTHER METHOD AS APPROVED BY THE ENGINEER.
9. WHEN DIRECTED BY THE ENGINEER, UNSUITABLE MATERIAL THAT IS ENCOUNTERED AT THE BOTTOM OF THE EXCAVATED TRENCH (BELOW THE AREA IDENTIFIED AS "STRUCTURAL BEDDING" ABOVE) WILL BE EXCAVATED AND REPLACED WITH SELECTED PIPE BEDDING. THE QUANTITY OF MATERIAL REQUIRED TO BACKFILL THE UNDERCUT AREA UP TO THE SELECTED PIPE BEDDING PAY LIMIT DESIGNATED ABOVE WILL BE MEASURED AND PAID FOR AS "SELECTED PIPE BEDDING."
10. WHEN THE EXISTING MATERIAL EXCAVATED FOR THE PIPE TRENCH IS DETERMINED BY THE ENGINEER TO BE UNSUITABLE FOR BACKFILLING THE PIPE (ABOVE THE AREA IDENTIFIED ABOVE AS THE HAUNCH), BORROW MATERIAL OR MATERIAL FROM THE ROADWAY EXCAVATION WILL BE USED TO BACKFILL THE PIPE. IF SUITABLE MATERIAL IS NOT AVAILABLE, THE ENGINEER MAY AUTHORIZE THE USE OF "SELECTED PIPE BACKFILL."

MINIMUM HEIGHT OF FILL "H" OVER CIRCULAR R.C. PIPE CULVERTS

	CLASS OF PIPE			
	CLASS III		CLASS IV	CLASS V
INSTALLATION TYPE	TYPE 1 OR 2	TYPE 3	ALL	ALL
PIPE ID (IN.)	FEET			
12-15	2	2.5	2	1
18-24	2.5	3	2	1
27-33	3	4	2	1
36-42	3.5	5	2	1
48	4.5	5.5	2	1
54-60	5	7	2	1
66-78	6	8	2	1
84-108	7.5	8	2	1

NOTE: FOR MINIMUM COVER VALUES, "H" SHALL INCLUDE A MINIMUM OF 12" OF PAVEMENT AND/OR BASE.

MAXIMUM HEIGHT OF FILL "H" OVER CIRCULAR R.C. PIPE CULVERTS

INSTALLATION TYPE	CLASS OF PIPE		
	CLASS III	CLASS IV	CLASS V
	FEET		
TYPE 1	21	32	50
TYPE 2	16	25	39
TYPE 3	12	20	30

NOTE: IF FILL HEIGHT EXCEEDS 50 FEET, A SPECIAL DESIGN CONCRETE PIPE WILL BE REQUIRED USING TYPE 1 INSTALLATION.

MINIMUM HEIGHT OF FILL "H" OVER R.C. ARCH & HORIZONTAL ELLIPTICAL PIPE CULVERTS

INSTALLATION TYPE	CLASS OF PIPE	
	CLASS III	CLASS IV
	FEET	
TYPE 2 OR TYPE 3	2.5	1.5

NOTE: TYPE 1 INSTALLATION WILL NOT BE ALLOWED FOR ARCH & HORIZONTAL ELLIPTICAL PIPE CULVERTS.

NOTE: FOR MINIMUM COVER VALUES, "H" SHALL INCLUDE A MINIMUM OF 12" OF PAVEMENT AND/OR BASE.

MAXIMUM HEIGHT OF FILL "H" OVER R.C. ARCH & HORIZONTAL ELLIPTICAL PIPE CULVERTS

INSTALLATION TYPE	CLASS OF PIPE	
	CLASS III	CLASS IV
	FEET	
TYPE 2	13	21
TYPE 3	10	16

NOTE: TYPE 1 INSTALLATION WILL NOT BE ALLOWED FOR ARCH & HORIZONTAL ELLIPTICAL PIPE CULVERTS.

DATE	REVISION	DATE FILMED
2-27-14	REVISED GENERAL NOTE 1.	
12-15-11	REVISED FOR LRFD DESIGN SPECIFICATIONS	
5-18-00	REVISED TYPE 3 BEDDING & ADDED NOTE	
3-30-00	REVISED INSTALLATIONS	
11-06-97	ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION

CONCRETE PIPE CULVERT FILL HEIGHTS & BEDDING

STANDARD DRAWING PCC-1

CORRUGATED STEEL PIPE (ROUND)

PIPE DIAMETER (INCHES)	① MINUMUM COVER TOP OF PIPE TO TOP OF GROUND "H" (FEET)	MAX. FILL HEIGHT "H" ABOVE TOP OF PIPE (FEET)				
		METAL THICKNESS (INCHES)				
		0.064	0.079	0.109	0.138	0.168
2⅔ INCH BY ½ INCH CORRUGATION RIVETED, WELDED, OR HELICAL LOCK-SEAM						
12	1	84	91			
15	1	67	73			
18	1	56	61			
24	1	42	46	59		
30	2	34	36	47		
36	2		30	39	41	
42	2		43	67	70	73
48	2		37	58	61	64
② 3 INCH BY 1 INCH OR 5 INCH BY 1 INCH CORRUGATION RIVETED, WELDED, BOLTED, OR HELICAL LOCK-SEAM						
36	1	48	60	88	111	118
42	1	41	51	72	90	102
48	1	36	45	64	77	85
54	2	32	40	59	71	79
60	2	29	36	53	64	71
66	2	26	33	47	58	64
72	2	24	30	44	53	59
78	2		28	41	49	54
84	2		26	38	45	51
90	2		24	35	43	45
96	2		22	33	40	44
102	2			31	38	42
108	2			30	35	39
114	2			28	34	37
120	2			27	32	35

CORRUGATED ALUMINUM PIPE (ROUND)

PIPE DIAMETER (INCHES)	① MINUMUM COVER TOP OF PIPE TO TOP OF GROUND "H" (FEET)	MAX. FILL HEIGHT "H" ABOVE TOP OF PIPE (FEET)				
		METAL THICKNESS IN INCHES				
		0.060	0.075	0.105	0.135	0.164
		2 ⅔ INCH BY ½ INCH CORRUGATION RIVETED OR HELICAL LOCK-SEAM				
12	1	45	45			
18	2	30	30	52		
24	2	22	22	39	41	
30	2		18	31	32	34
36	2.5		15	26	27	28
42	2			43	43	44
48	2			40	41	43
54	2			35	37	38
60	2				33	34
66	2					31
72	2					29

CONSTRUCTION SEQUENCE

1. PLACE STRUCTURAL BEDDING MATERIAL TO GRADE. DO NOT COMPACT.
2. INSTALL PIPE TO GRADE.
3. COMPACT STRUCTURAL BEDDING OUTSIDE THE MIDDLE THIRD OF THE PIPE.
4. COMPLETE STRUCTURAL BACKFILL OPERATION BY WORKING FROM SIDE TO SIDE OF THE PIPE. THE SIDE TO SIDE STRUCTURAL BACKFILL DIFFERENTIAL SHALL NOT EXCEED 24 INCHES OR 1/3 THE SIZE OF THE PIPE, WHICHEVER IS LESS.

NOTE: STRUCTURAL BACKFILL AND STRUCTURAL BEDDING MATERIAL WILL NOT BE PAID FOR SEPARATELY, BUT COMPENSATION WILL BE CONSIDERED TO BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF METAL PIPE.

INSTALLATION TYPE	MATERIAL REQUIREMENTS FOR STRUCTURAL BACKFILL AND STRUCTURAL BEDDING
TYPE 1	AGGREGATE BASE COURSE (CLASS 4, 5, 6, OR 7)
TYPE 2	SELECTED MATERIALS (CLASS SM-1, SM-2, OR SM-4) OR TYPE 1 INSTALLATION MATERIAL ③

③ SM-3 WILL NOT BE ALLOWED.

EQUIVALENT METAL THICKNESSES AND GAUGES

METAL THICKNESS IN INCHES			GAUGE NUMBER
STEEL			
ZINC COATED	UNCOATED	ALUMINUM	
0.064	0.0598	0.060	16
0.079	0.0747	0.075	14
0.109	0.1046	0.105	12
0.138	0.1345	0.135	10
0.168	0.1644	0.164	8

CORRUGATED METAL PIPE ARCHES

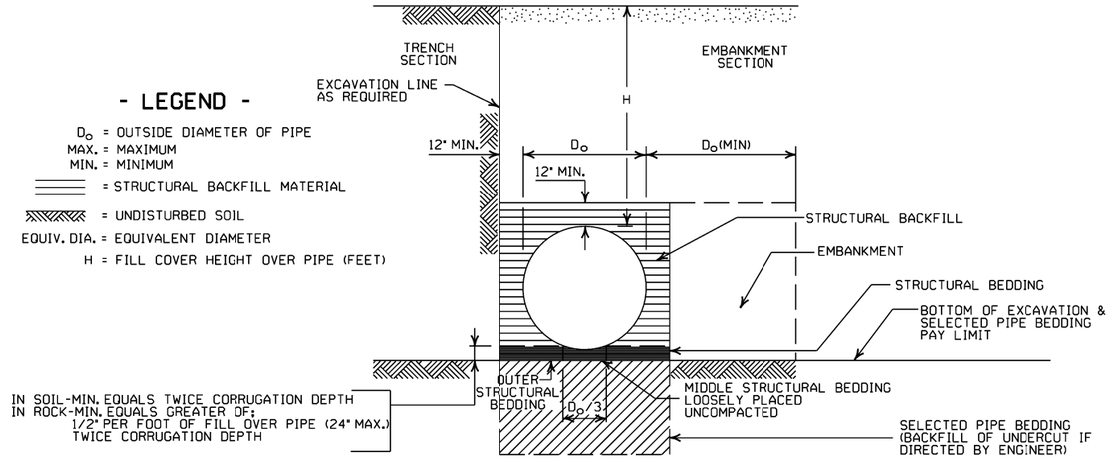
EQUIV. DIA. (INCHES)	PIPE DIMENSION SPAN X RISE (INCHES)	MINUMUM CORNER RADIUS (INCHES)	STEEL			ALUMINUM		
			MIN. THICKNESS REQUIRED INCHES	① MIN. HEIGHT OF FILL, "H" (FT.)	MAX. HEIGHT OF FILL, "H" (FT.)	MIN. THICKNESS REQUIRED INCHES	① MIN. HEIGHT OF FILL, "H" (FT.)	MAX. HEIGHT OF FILL, "H" (FT.)
				INSTALLATION	INSTALLATION		INSTALLATION	INSTALLATION
				TYPE 1	TYPE 1		TYPE 1	TYPE 1
			2 ⅔ INCH BY ½ INCH CORRUGATION RIVETED, WELDED, OR HELICAL LOCK-SEAM			2 ⅔ INCH BY ½ INCH CORRUGATION RIVETED OR HELICAL LOCK-SEAM		
15	17x13	3	0.064	2	15	0.060	2	15
18	21x15	3	0.064	2	15	0.060	2	15
21	24x18	3	0.064	2.25	15	0.060	2.25	15
24	28x20	3	0.064	2.5	15	0.075	2.5	15
30	35x24	3	0.079	3	12	0.075	3	12
36	42x29	3½	0.079	3	12	0.105	3	12
42	49x33	4	0.079	3	12	0.105	3	12
48	57x38	5	0.109	3	13	0.135	3	13
54	64x43	6	0.109	3	14	0.135	3	14
60	71x47	7	0.138	3	15	0.164	3	15
66	77x52	8	0.168	3	15			
72	83x57	9	0.168	3	15			
			② 3 INCH BY 1 INCH OR 5 INCH BY 1 INCH CORRUGATION RIVETED, WELDED, OR HELICAL LOCK-SEAM					
				INSTALLATION	INSTALLATION			
				TYPE 2	TYPE 1	TYPE 2	TYPE 1	
36	40x31	5	0.079	3	2	12	15	
42	46x36	6	0.079	3	2	13	15	
48	53x41	7	0.079	3	2	13	15	
54	60x46	8	0.079	3	2	13	15	
60	66x51	9	0.079	3	2	13	15	
66	73x55	12	0.079	3	2	15	15	
72	81x59	14	0.079	3	2	15	15	
78	87x63	14	0.079	3	2	15	15	
84	95x67	16	0.109	3	2	15	15	
90	103x71	16	0.109	3	2	15	15	
96	112x75	18	0.109	3	2	15	15	
102	117x79	18	0.109	3	2	15	15	
108	128x83	18	0.138	3	2	15	15	

① FOR MINIMUM COVER VALUES, "H" SHALL INCLUDE A MINIMUM 12" OF PAVEMENT AND/OR BASE.

② WHERE THE STANDARD 2 2/3"x ½" CORRUGATION AND GAUGE IS SPECIFIED FOR A GIVEN DIAMETER, A PIPE OF THE SAME DIAMETER WITH A 3" x 1" OR 5" x 1" CORRUGATION MAY BE SUBSTITUTED, PROVIDING IT IS GAUGED FOR A FILL HEIGHT CONDITION EQUAL TO OR GREATER THAN THE MAXIMUM FILL HEIGHT CONDITION FOR THE SPECIFIED GAUGE AND CORRUGATION.

- LEGEND -

D_o = OUTSIDE DIAMETER OF PIPE
MAX. = MAXIMUM
MIN. = MINIMUM
= STRUCTURAL BACKFILL MATERIAL
= UNDISTURBED SOIL
EQUIV. DIA. = EQUIVALENT DIAMETER
H = FILL COVER HEIGHT OVER PIPE (FEET)



EMBANKMENT AND TRENCH INSTALLATIONS

1. STRUCTURAL BACKFILL, EMBANKMENT, AND OUTER STRUCTURAL BEDDING MATERIAL SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OR CLASS OF MATERIAL USED.
2. INSTALLATION TYPE 1 OR 2 MAY BE USED FOR CORRUGATED STEEL OR ALUMINUM PIPE (ROUND).
3. INSTALALTION TYPE 1 SHALL BE USED FOR CORRUGATED STEEL OR ALUMINUM PIPE ARCHES WITH 2⅔" X ½" CORRUGATION.
4. INSTALLATION TYPE 1 OR 2 MAY BE USED FOR CORRUGATED STEEL OR ALUMINUM PIPE ARCHES WITH 3" X 1" OR 5" X 1" CORRUGATION.

GENERAL NOTES

1. METAL PIPE CULVERT CONSTRUCTION SHALL CONFORM TO ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION), WITH APPLICABLE SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS. UNLESS OTHERWISE NOTED IN THE PLANS, SECTION AND SUBSECTION REFER TO THE STANDARD CONSTRUCTION SPECIFICATIONS.
2. METAL PIPE CULVERT DESIGN SHALL CONFORM TO AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, FIFTH EDITION (2010) WITH 2010 INTERIMS.
3. METAL PIPE CULVERT MATERIALS AND INSTALLATIONS SHALL CONFORM TO SECTION 606 AND JOB SPECIAL PROVISION "METAL PIPE".
4. ALL PIPE SHALL BE PROTECTED DURING CONSTRUCTION BY A COVER SUFFICIENT TO PREVENT DAMAGE FROM PASSAGE OF EQUIPMENT.
5. THE MINIMUM TRENCH WIDTH SHALL BE THE OUTSIDE DIAMETER OF THE PIPE PLUS 24 INCHES. THE MAXIMUM ALLOWABLE TRENCH WIDTH SHALL BE THE MINIMUM WIDTH PRACTICABLE FOR WORKING CONDITIONS.
6. MULTIPLE PIPE CULVERTS SHALL BE INSTALLED WITH A MINIMUM CLEARANCE OF 24 INCHES BETWEEN STRINGS OF PIPE. REFER TO STD. DWG. FES-2 FOR MINIMUM CLEARANCE WHERE FLARED END SECTIONS ARE USED.
7. IMPERVIOUS MATERIAL SHOULD BE PLACED AS DIRECTED BY THE ENGINEER AT THE ENDS OF THE CULVERT TO PREVENT LOSS OF STRUCTURAL BEDDING WHEN PERVIOUS MATERIAL IS USED FOR STRUCTURAL BEDDING AND/OR BACKFILL.
8. WHEN DIRECTED BY THE ENGINEER, UNSUITABLE MATERIAL THAT IS ENCOUNTERED AT THE BOTTOM OF THE EXCAVATED TRENCH (BELOW THE AREA IDENTIFIED AS "STRUCTURAL BEDDING" ABOVE) WILL BE EXCAVATED AND REPLACED WITH SELECTED PIPE BEDDING. THE QUANTITY OF MATERIAL REQUIRED TO BACKFILL THE UNDERCUT AREA UP TO THE SELECTED PIPE BEDDING PAY LIMIT DESIGNATED ABOVE WILL BE MEASURED AND PAID FOR AS "SELECTED PIPE BEDDING."
9. WHEN THE EXISTING MATERIAL EXCAVATED FOR THE PIPE TRENCH IS DETERMINED BY THE ENGINEER TO BE UNSUITABLE FOR BACKFILLING THE PIPE (ABOVE THE AREA IDENTIFIED AS STRUCTURAL BACKFILL), BORROW MATERIAL OR MATERIAL FROM THE ROADWAY EXCAVATION WILL BE USED TO BACKFILL THE PIPE. IF SUITABLE MATERIAL IS NOT AVAILABLE, THE ENGINEER MAY AUTHORIZE THE USE OF "SELECTED PIPE BACKFILL."

DATE	REVISION	DATE FILMED
2-27-14	REVISED GENERAL NOTE 1.	
12-15-11	REVISED FOR LRFD DESIGN SPECS	
3-30-00	REVISED INSTALLATIONS	
11-06-97	ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION

METAL PIPE CULVERT FILL HEIGHTS & BEDDING

STANDARD DRAWING PCM-1

INSTALLATION TYPE	•• MATERIAL REQUIREMENTS FOR STRUCTURAL BACKFILL AND STRUCTURAL BEDDING
TYPE 2	•SELECTED MATERIALS (CLASS SM-1, SM-2, OR SM-4)

• AGGREGATE BASE COURSE (CLASS 4, 5, 6, OR 7) MAY BE USED IN LIEU OF SELECTED MATERIAL.

SM3 WILL NOT BE ALLOWED.

•• STRUCTURAL BEDDING MATERIAL SHALL HAVE A MAXIMUM PARTICLE SIZE OF 1INCH. STRUCTURAL BACKFILL MATERIAL SHALL BE FREE OF ORGANIC MATERIAL, STONES LARGER THAN 1.50 INCH IN GREATEST DIMENSION, OR FROZEN LUMPS.

STRUCTURAL BACKFILL AND STRUCTURAL BEDDING MATERIAL WILL NOT BE PAID FOR SEPARATELY, BUT COMPENSATION WILL BE CONSIDERED TO BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF PVC PIPE.

MINIMUM TRENCH WIDTH BASED ON FILL HEIGHT "H"

PIPE DIAMETER	TRENCH WIDTH (FEET)	
	"H" < 10'-0"	"H" >OR= 10'-0"
18"	4'-6"	4'-6"
24"	5'-0"	6'-0"
30"	5'-6"	7'-6"
36"	6'-0"	9'-0"

MULTIPLE INSTALLATION OF PVC PIPES

PIPE DIAMETER	CLEAR DISTANCE BETWEEN PIPES
18"	1'-6"
24"	2'-0"
30"	2'-6"
36"	3'-0"

MAXIMUM FILL HEIGHT BASED ON STRUCTURAL BACKFILL

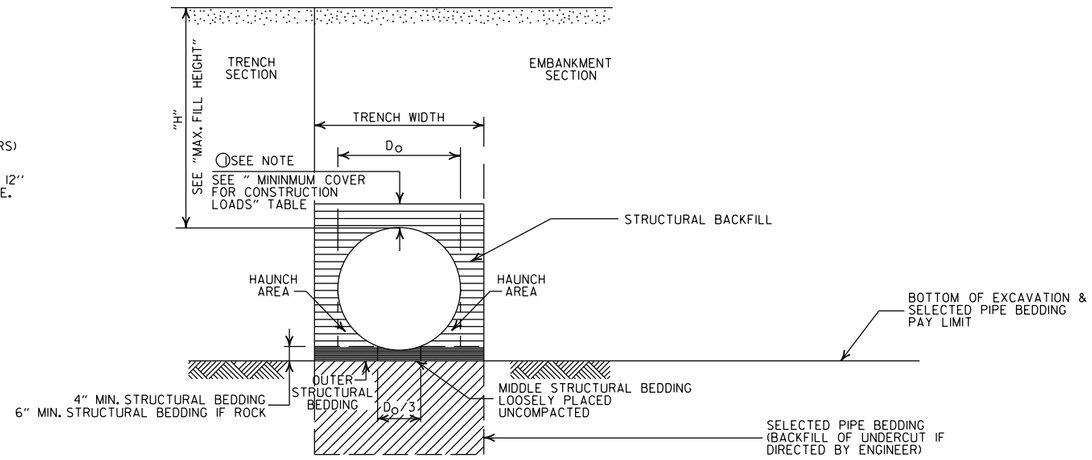
PIPE DIAMETER	"H"
18"	45'-0"
24"	45'-0"
30"	40'-0"
36"	40'-0"

① NOTE:
12" MIN. (18" - 36" DIAMETERS)
MINIMUM COVER VALUE, "H" SHALL INCLUDE A MINIMUM 12" OF PAVEMENT AND/OR BASE.

MINIMUM COVER FOR CONSTRUCTION LOADS

PIPE DIAMETER	② MIN. COVER (FEET) FOR INDICATED CONSTRUCTION LOADS			
	18.0-50.0 (KIPS)	50.0-75.0 (KIPS)	75.0-110.0 (KIPS)	110.0-175.0 (KIPS)
18" THRU 36"	2'-0"	2'-6"	3'-0"	3'-0"

②MINIMUM COVER SHALL BE MEASURED FROM TOP OF PIPE TO TOP OF THE MAINTAINED CONSTRUCTION ROADWAY SURFACE. THE SURFACE SHALL BE MAINTAINED.



TYPE 2 EMBANKMENT AND TRENCH INSTALLATIONS

1. STRUCTURAL BACKFILL, EMBANKMENT, AND OUTER STRUCTURAL BEDDING MATERIAL SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OR CLASS OF MATERIAL USED.

CONSTRUCTION SEQUENCE

1. PLACE STRUCTURAL BEDDING MATERIAL TO GRADE. DO NOT COMPACT.
2. INSTALL PIPE TO GRADE.
3. COMPACT STRUCTURAL BEDDING OUTSIDE THE MIDDLE THIRD OF THE PIPE.
4. THE STRUCTURAL BACKFILL SHALL BE PLACED AND COMPACTED IN LAYERS NOT EXCEEDING 8". THE LAYERS SHALL BE BROUGHT UP EVENLY AND SIMULTANEOUSLY TO THE ELEVATION OF THE MINIMUM COVER.
5. PIPE INSTALLATION MAY REQUIRE THE USE OF RESTRAINTS, WEIGHTING OR OTHER APPROVED METHODS IN ORDER TO HELP MAINTAIN GRADE AND ALIGNMENT.

GENERAL NOTES

1. PIPE SHALL CONFORM TO ASTM F949, CELL CLASS 12454. INSTALLATION SHALL CONFROM TO JOB SPECIAL PROVISION "PLASTIC PIPE" AND SECTION 606 OF THE STANDARD SPECIFICIATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION).
2. PLASTIC PIPE CULVERT DESIGN SHALL CONFORM TO AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, FIFTH EDITION (2010) WITH 2010 INTERIMS.
3. THE MAXIMUM ALLOWABLE TRENCH WIDTH SHALL BE THE MINIMUM WIDTH PLUS A SUFFICIENT WIDTH TO ENSURE WORKING ROOM TO PROPERLY AND SAFELY PLACE AND COMPACT HAUNCHING AND OTHER BACKFILL MATERIAL.
4. IMPERVIOUS MATERIAL SHOULD BE PLACED AS DIRECTED BY THE ENGINEER AT THE ENDS OF THE CULVERT TO PREVENT LOSS OF STRUCTURAL BEDDING WHEN PERVIOUS MATERIAL IS USED FOR STRUCTURAL BEDDING AND/OR BACKFILL.
5. WHEN DIRECTED BY THE ENGINEER, UNSUITABLE MATERIAL THAT IS ENCOUNTERED AT THE BOTTOM OF THE EXCAVATED TRENCH (BELOW THE AREA IDENTIFIED AS "STRUCTURAL BEDDING" ABOVE) WILL BE EXCAVATED AND REPLACED WITH SELECTED PIPE BEDDING. THE QUANTITY OF MATERIAL REQUIRED TO BACKFILL THE UNDERCUT AREA UP TO THE SELECTED PIPE BEDDING PAY LIMIT DESIGNATED ABOVE WILL BE MEASURED AND PAID FOR AS "SELECTED PIPE BEDDING."
6. WHEN THE EXISTING MATERIAL EXCAVATED FOR THE PIPE TRENCH IS DETERMINED BY THE ENGINEER TO BE UNSUITABLE FOR BACKFILLING THE PIPE (ABOVE THE AREA IDENTIFIED ABOVE AS STRUCTURAL BACKFILL), BORROW MATERIAL OR MATERIAL FROM THE ROADWAY EXCAVATION WILL BE USED TO BACKFILL THE PIPE. IF SUITABLE MATERIAL IS NOT AVAILABLE, THE ENGINEER MAY AUTHORIZE THE USE OF "SELECTED PIPE BACKFILL."
7. FOR PIPE TYPES THAT ARE NOT SMOOTH ON THE OUTSIDE (CORRUGATED OR PROFILE WALLS), BACKFILL GRADATIONS SHOULD BE SELECTED THAT WILL PERMIT THE FILLING OF THE CORRUGATION OR PROFILE VALLEY.
8. PVC PIPES OF DIAMETERS OTHER THAN SHOWN WILL NOT BE ALLOWED.
9. JOINTS FOR PVC PIPE SHALL MEET THE REQUIREMENTS FOR SOIL TIGHTNESS AS SPECIFIED IN AASHTO SECTION 26.4.2.4 AND 30.4.2 "AASHTO LRFD BRIDGE CONSTRUCTION SPECIFICATIONS." JOINTS SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.

- LEGEND -

H = FILL HEIGHT (FT.)
D_O = OUTSIDE DIAMETER OF PIPE
MAX. = MAXIMUM
MIN. = MINIMUM

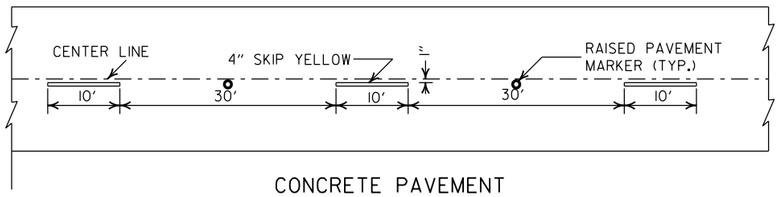
= STRUCTURAL BACKFILL MATERIAL
= UNDISTURBED SOIL

DATE	REVISION	DATE FILMED
2-27-14	REVISED GENERAL NOTE 1.	
12-15-11	REV GENERAL NOTES & MINIMUM COVER NOTE; DELETED SM3 MATERIAL	
11-17-10	ISSUED	

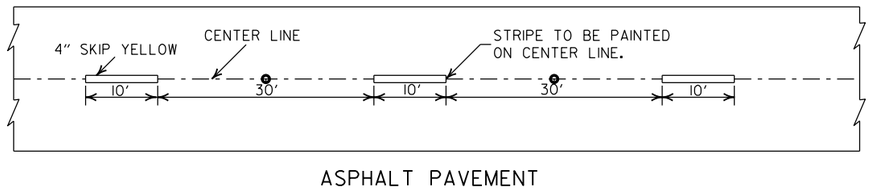
ARKANSAS STATE HIGHWAY COMMISSION

PLASTIC PIPE CULVERT (PVC F949)

STANDARD DRAWING PCP-2

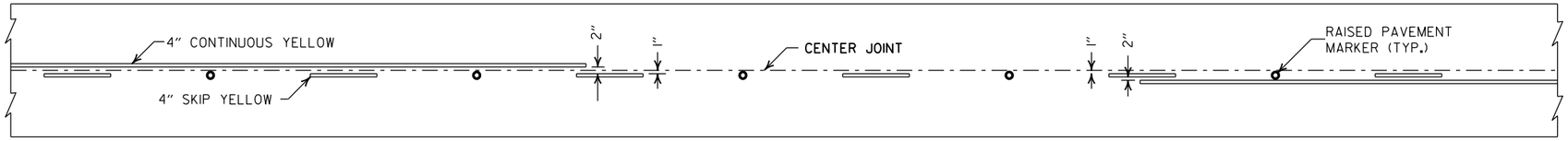


CONCRETE PAVEMENT

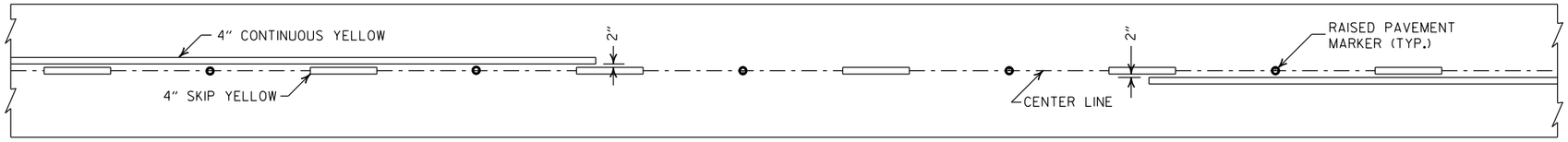


ASPHALT PAVEMENT

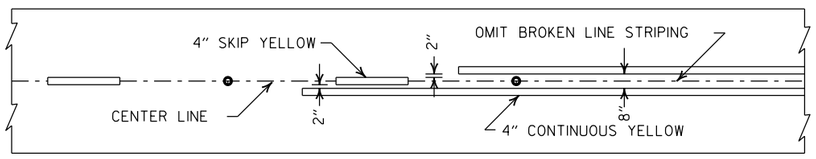
BROKEN LINE STRIPING



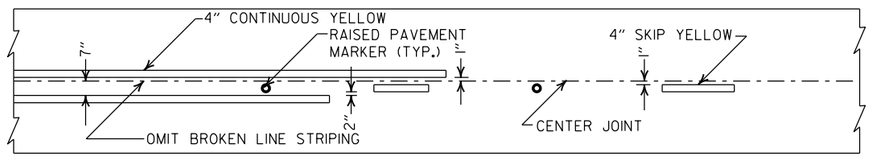
SOLID LINE STRIPING ON CONCRETE PAVEMENT



SOLID LINE STRIPING ON ASPHALT PAVEMENT

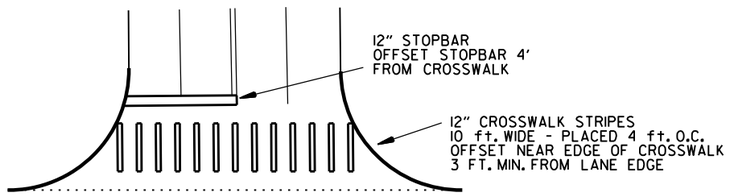


ASPHALT PAVEMENT



CONCRETE PAVEMENT

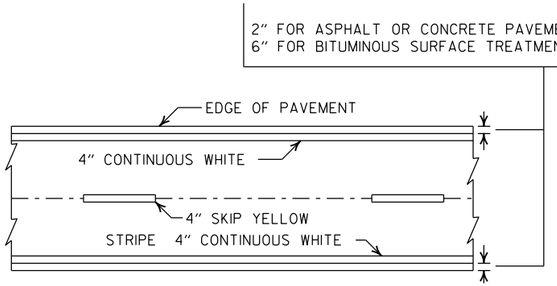
STRIPING AT ADJACENT NO PASSING LANES



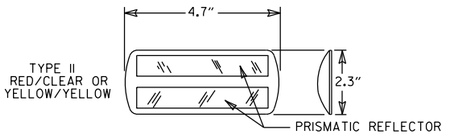
CROSSWALK AND STOPBAR DETAILS

NOTES:

1. ALL LINES SHALL HAVE A WIDTH OF 4 INCHES.
2. THE THICKNESS AND RATE OF PAINT APPLICATION SHALL BE AS SPECIFIED IN SECTION 718 OF THE STANDARD SPECIFICATIONS.
3. THIS DRAWING SHALL BE USED IN CONJUNCTION WITH THE LATEST REVISED ADDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES."
4. RAISED PAVEMENT MARKERS SHALL BE CENTERED BETWEEN SKIP LINES ON 40 FEET SPACING UNLESS OTHERWISE SHOWN ON THE PLANS.



PAVEMENT EDGE LINE MARKING



NOTE:
THE RED LENS OF THE TYPE II R.P.M. SHALL FACE THE INCORRECT TRAFFIC MOVEMENT.

DETAIL OF STANDARD RAISED PAVEMENT MARKERS

GENERAL NOTES:

THIS DRAWING SHOULD BE CONSIDERED AS TYPICAL ONLY AND THE FINAL LOCATION OF THE STRIPING AND RAISED PAVEMENT MARKERS SHALL BE DETERMINED BY THE ENGINEER.

THIS DRAWING SHOULD BE USED IN CONJUNCTION WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", LATEST REVISION.

NOTE:

DIMENSIONS SHOWN FOR RAISED PAVEMENT MARKERS ARE TYPICAL. THE CONTRACTOR MAY SUBSTITUTE SIMILAR MARKERS WITH THE APPROVAL OF THE ENGINEER. REQUESTING APPROVAL FOR SIMILAR MARKERS MAY BE MADE BY REFERRING TO THE AHTD QUALIFIED PRODUCTS LIST.

DATE	REVISION	FILMED
9-12-13	REVISED DETAIL OF STANDARD RAISED PAVEMENT MARKERS	
11-17-10	REVISED GENERAL NOTES & REMOVED PLOWABLE PVMT MRKRS	
11-18-04	REVISED NOTE 2 & GENERAL NOTES	
8-22-02	ADDED CROSSWALK & STOPBAR DTLS.	
7-02-98	ADDED DETAILS OF STD. RAISED PAV'T. MARKERS	
4-26-96	REV. NOTES 3&4; ADDED R.P.M.	
9-30-80	DRAWN	1-9-30-80

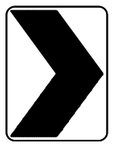
ARKANSAS STATE HIGHWAY COMMISSION

PAVEMENT MARKING DETAILS

STANDARD DRAWING PM-1

R1-1
30"X30"

W1-3
30"X30"
(LT. OR RT.)



W1-8
18"X24"

W2-5
30"X30"

W3-1
36"X36"

W5-1
36"X36"

M6-3
21"X15"

R1-2
36"X36"X36"

W1-4
30"X30"
(LT. or RT.)

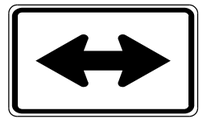
W2-1
30"X30"

S1-1
36"X36"

W3-2
36"X36"

County
Route Marker
M1-6
24"X24"

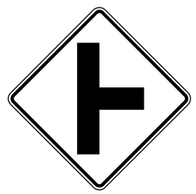
NOTE: REFLECTORIZED YELLOW LEGEND (COUNTY NAME, ROUTE LETTER & NUMBER) & BORDER ON A BLUE BACKGROUND.



M6-4
21"X15"

R2-1
24"X30"

W1-5
30"X30"
(LT. or RT.)

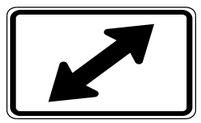


W2-2
30"X30"

W5-2
36"X36"

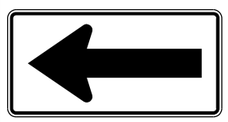
W8-3
36"X36"

R1-3P
18"X6"

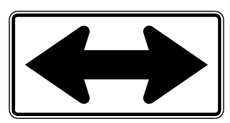


M6-5
21"X15"

W1-1
30"X30"
(LT. or RT.)



W1-6
48"X24"

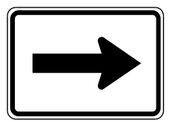


W1-7
48"X24"

W2-3
30"X30"
(LT. or RT.)

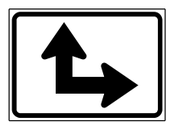
W5-3
36"X36"

W13-1P
18"X18"



M6-1
21"X15"

NOTE: ALL M6 SIGNS TO BE MADE WITH REFLECTORIZED YELLOW ARROW & BORDER WITH BLUE BACKGROUND.

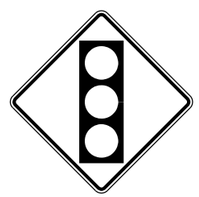


M6-6
21"X15"

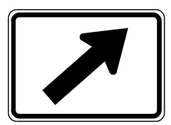
W1-2
30"X30"
(LT. or RT.)

W2-4
30"X30"

W10-1
36" DIAMETER



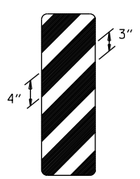
W3-3
36"X36"



M6-2
21"X15"

S4-3P
24"X8"

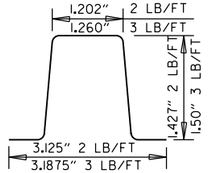
S4-2P
24"X10"



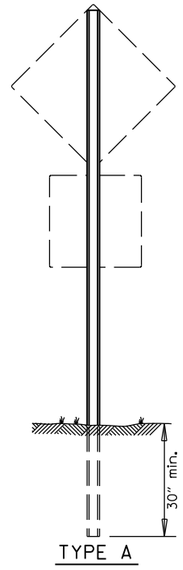
OM-3
12"X36"
(LT. or RT.)

MINIMUM DIMENSIONS SHOWN

SUPPORT SECTION

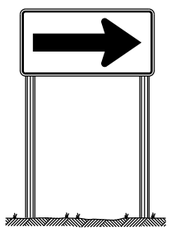


(U-CHANNEL)
STANDARD SUPPORT
ASSEMBLIES



TYPE A

NOTE: LENGTH OF SIGN POSTS SHALL BE DETERMINED SO AS TO PROVIDE FOR MINIMUM VERTICAL CLEARANCES AS CALLED FOR IN THE SPECIFICATIONS PLUS A MINIMUM VERTICAL PENETRATION OF 30" IN THE SOIL.



TYPE B

TYPE C

MINIMUM WEIGHT

TYPE A & B = 3 LBS./FT.
TYPE C = 2 LBS./FT.

STANDARD HIGHWAY SIGNS

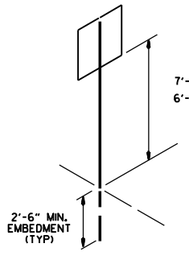
DATE	REVISION	DATE FILMED
9-12-13	DELETED JOB NO. BLOCK; REVISED RI-3 TO RI-3P	
4-17-08	REVISED SIGN DESIGNATION - W3-1 & W3-2	
4-10-03	REVISED W5-2, W8-3, OM-3; ADDED WI-8	
1-5-81	REDRAWN	960-1-15-81
9-15-78	ADDED WI4-3	877-9-15-78
9-2-76	POST WT.	623-9-3-76
5-3-76	STEEL POST WT. FROM 2#-3#; ADDED S4-2 & S4-3	504-5-3-76
8-12-74	REV. HT. TYPE "C" ASSEMBLY	500-8-21-74
12-21-72	ADDED M6-2,3,4,5,6	500-12-21-72
12-1-72	ISSUED	562-12-1-72

SUPPORT ASSEMBLIES

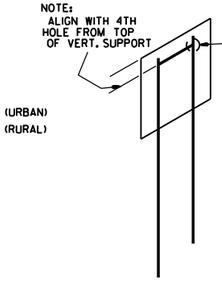
ARKANSAS STATE HIGHWAY COMMISSION

STANDARD HIGHWAY SIGNS AND SUPPORT ASSEMBLIES

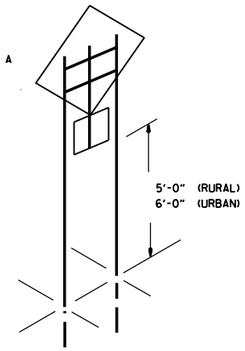
STANDARD DRAWING SHS-1



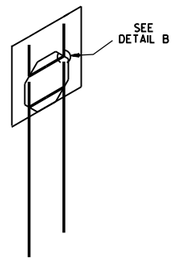
U-1



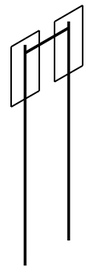
U-2



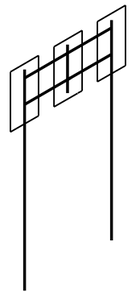
U-2 (A)



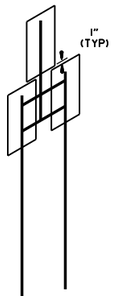
U-2 (B)



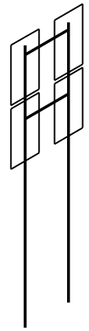
U-2 (1)



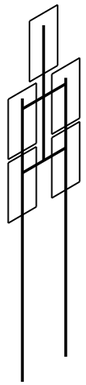
U-2 (2)



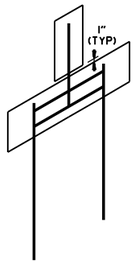
U-2 (3)



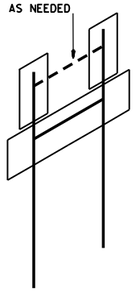
U-2 (4)



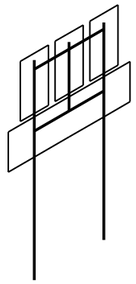
U-2 (5)



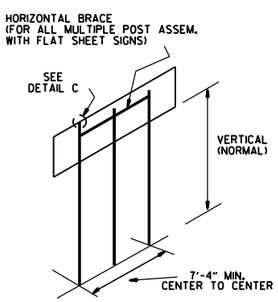
U-2 (6)



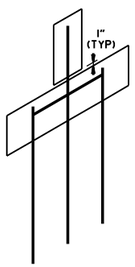
U-2 (7)



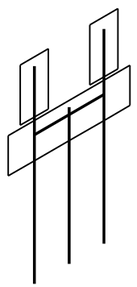
U-2 (8)



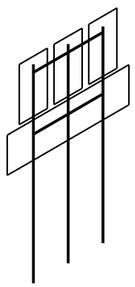
U-3



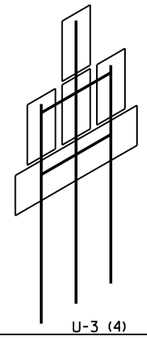
U-3 (1)



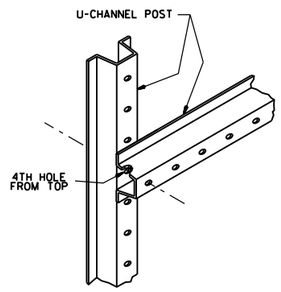
U-3 (2)



U-3 (3)

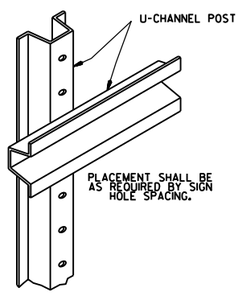


U-3 (4)



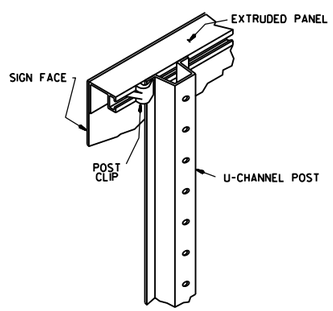
DETAIL A

SHOWING HORIZONTAL BRACE



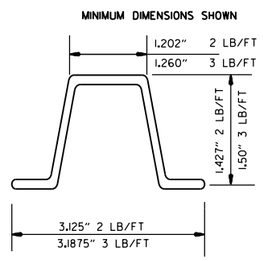
DETAIL B

SHOWING BACK-TO-BACK INSTALLATION



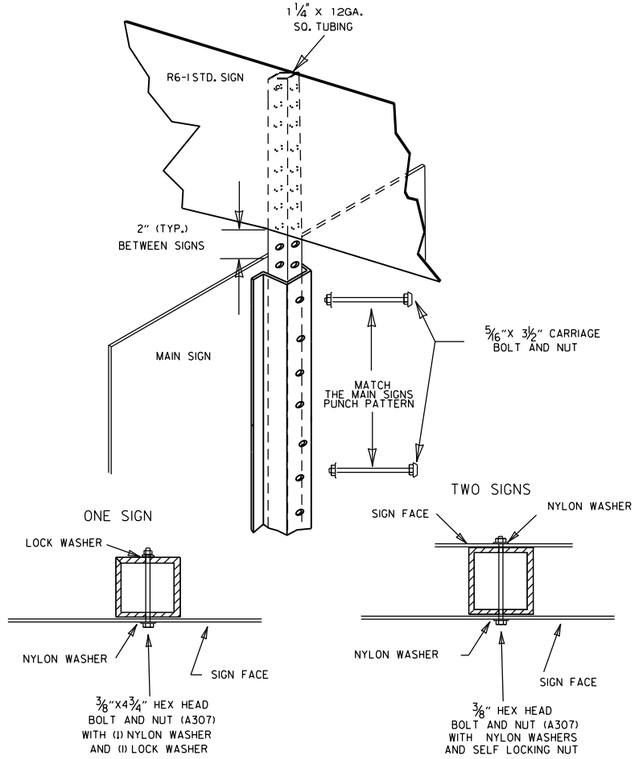
DETAIL C

SHOWING GUIDE SIGN MOUNTING WITH EXTRUDED PANELS



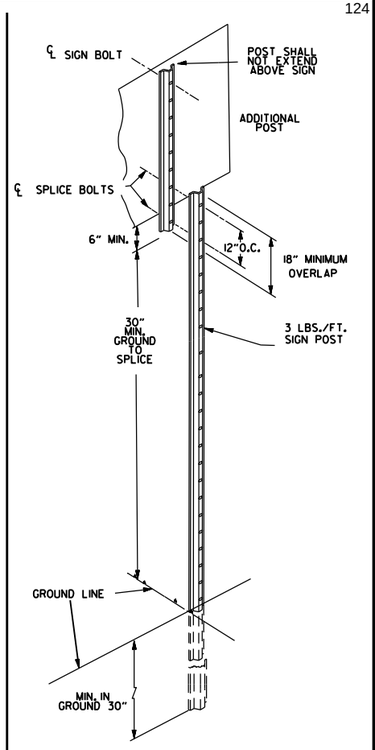
DETAIL D

U-CHANNEL POST



DETAIL E

R6-1 EXTENSION FOR U-CHANNEL POST



DETAIL F

DETAIL OF SPLICES

NOTES:

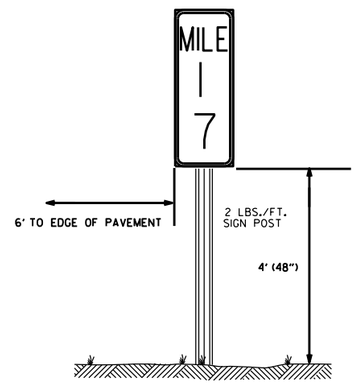
SIGNS AT LEAST 8' IN LENGTH MAY BE INSTALLED ON THREE 3 LB. POST. IN NO CASE SHALL THERE BE MORE THAN TWO 3 LB. POSTS WITHIN A 7' PATH.

SPLICES NECESSARY TO ATTAIN PROPER MOUNTING HEIGHT SHALL BE AS SHOWN IN DETAIL (F).

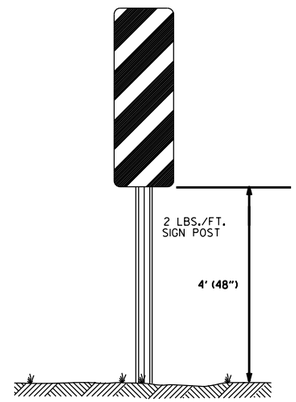
NORMAL INSTALLATIONS WILL REQUIRE 5/16" DIA. CARRIAGE BOLTS TO MOUNT SIGNS TO POST AND TO ASSEMBLE THE VARIOUS POST SUPPORTS.

ALL SIGN POSTS SHALL BE PLUMB.

THE POST FOR "TYPE U" SUPPORTS SHALL BE HOT DIP GALVANIZED.



TYPICAL MILE MARKER INSTALLATION



TYPICAL OM-3 INSTALLATION AT EDGE OF OBSTRUCTION

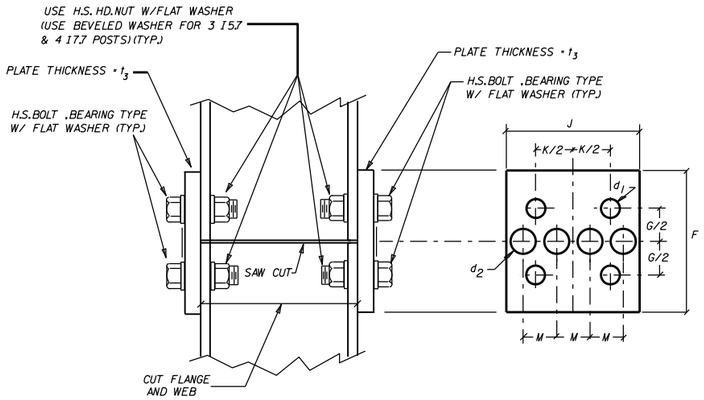
DATE	REVISION	FILMED
2-27-14	REVISED NOTES.	
9-12-13	REVISED U-2(3), U-2(6), U-3(1), DETAIL D; ADDED DETAILS E & F; ADDED TYPICAL MARKERS	
10-9-03	REMOVED ROUND POST & REVISED SPACING	
10-12-95	MOVED UPPER SPLICE	
6-8-95	REVISED SPLICE DETAIL	6-8-95
2-2-95	REDRAWN	2-2-95

ARKANSAS STATE HIGHWAY COMMISSION

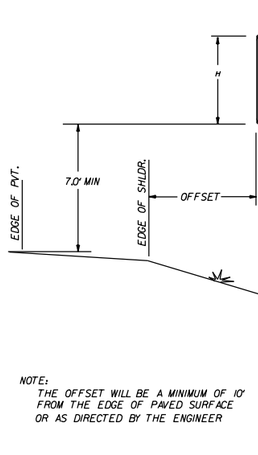
U-CHANNEL POST ASSEMBLIES

STANDARD DRAWING SHS-2

POST SIZE	BASE CONNECTION DATA											FUSE PLATE DATA									
	BOLT SIZE	BOLT TORQUE (INCH/LBS)	A	B	C	D	E	t_1	t_2	W	R	F	G		J	K	M	d_1	d_2	t_3	BOLT SIZE	WT.OF EACH FUSE PLATE LBS.
W 6X9												4¼"	2"		4"	2¼"	1"	9/16"	¾"	¼"	½" x 1½"	1.01
W 6X12	⅝" x 2¾"	450"-680"	5"	2"	1¼"	2¾"	1⅛"	¾"	½"	¼"	11/32"											
W 6X15												5"	2½"		6"	3½"	1½"	11/16"	1¼"	⅜"	⅝" x 2¼"	2.51
W 8X18												5"	2½"		5¼"	2¾"	1¼"	13/16"	1¼"	⅜"	¾" x 2¼"	2.26
W 8X21												5½"	2½"		5¼"	2¾"	1¼"	13/16"	1"	½"	¾" x 2¼"	3.35
W 10X22	¾" x 3½"	750"-1050"	6"	2¼"	1⅜"	3½"	1¼"	1"	¾"	5/16"	13/32"	6"	3"		5¾"	2¾"	1⅜"	13/16"	1⅛"	½"	¾" x 2¼"	4.03
W 10X26																						
W 12X26												6"	3"		6½"	3½"	1⅝"	15/16"	1⅜"	½"	¾" x 2¼"	4.47

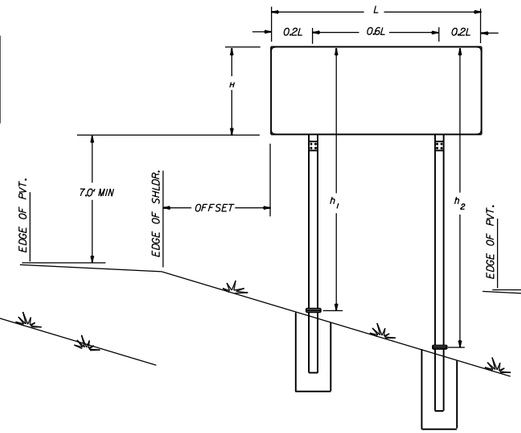


NOTE: USE H.S.HEX HEAD BOLTS,HEX HEAD NUTS AND BEVEL OR FLAT WASHERS (WHERE REQ.) UNDER NUTS. ALL HOLES SHALL BE DRILLED.ALL PLATE CUTS SHALL PREFERABLY BE SAW CUTS.HOWEVER FLAME CUTTING WILL BE PERMITTED PROVIDED ALL EDGES ARE GROUND. METAL PROJECTING BEYOND THE PLANE OF THE PLATE FACE WILL NOT BE PERMITTED. STEEL FUSE PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM-A36, ASTM-A441, ASTM-572 GRADE 50, OR ASTM-A588 MAY BE SUBSTITUTED FOR A36 AT THE OPTION OF THE FABRICATOR. STEEL USED SHALL HAVE AN ULTIMATE TENSILE STRENGTH NOT TO EXCEED 80 KSI.

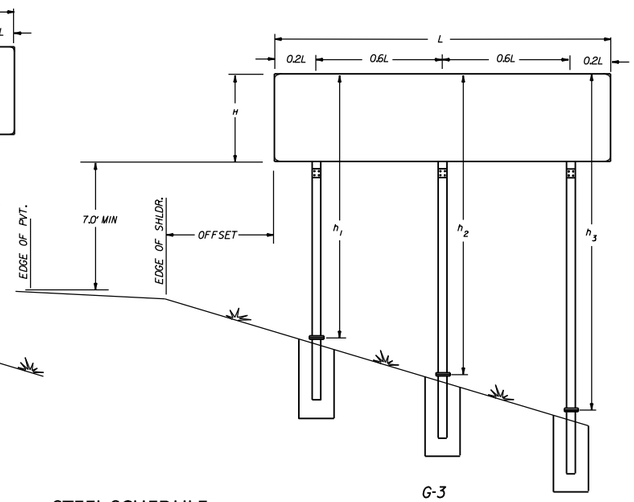


NOTE:
THE OFFSET WILL BE A MINIMUM OF 10' FROM THE EDGE OF PAVED SURFACE OR AS DIRECTED BY THE ENGINEER

G-1

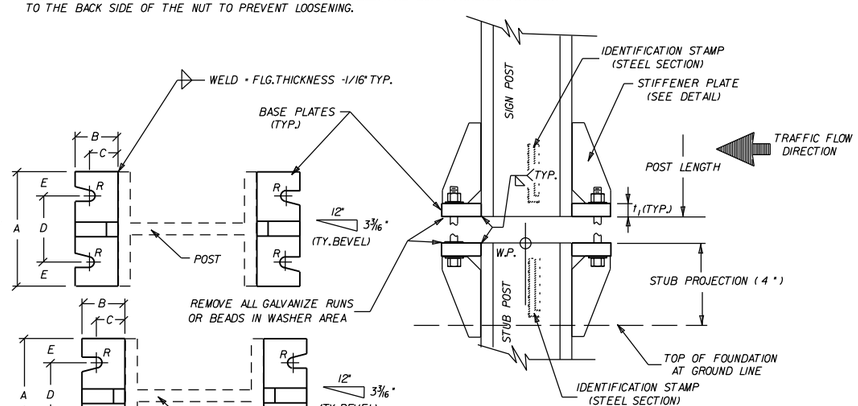


G-2

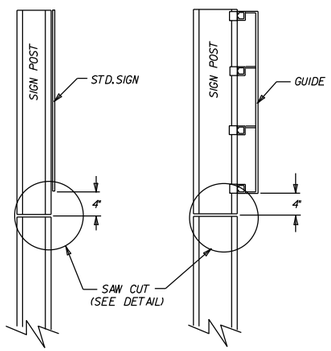


G-3

NOTE: SECTIONS SHOWN ARE FOR INSTALLATION ON THE RIGHT SHOULDER AND IN THE GORE. BOLT HOLES IN BASE PLATE ARE SLOTTED AND BEVELED AS SHOWN. USE H.S.BOLTS WITH HEX HD.,HEX NUT AND THREE FLAT WASHERS FOR EACH BOLT. SEE TABLE FOR BOLT DIA. AND TORQUE.
NOTE: ASSEMBLE SIGN POST TO STUB POST USING THE BOLTS SPEC.IN THE TABLE AND AS SHOWN IN THE ELEVATION DETAILS. THERE SHALL BE THREE FLAT WASHERS ON EACH BOLT LOCATED AS SHOWN IN THE ELEVATIONS. USE A SHIM TO PLUMB THE SIGN POST. THEN TIGHTEN THE BOLTS USING A 12" TO 15" WRENCH UNTIL THE WASHERS AND SHIMS ARE SEATED AND THE BOLT THREADS ARE CLEAR ,THEN LOOSEN EACH BOLT IN TURN AND RETIGHTEN IN A SYSTEMATIC ORDER TO THE PRESCRIBED TORQUE (SEE TABLE). THE BURR THREADS ADJACENT TO THE BACK SIDE OF THE NUT TO PREVENT LOOSENING.



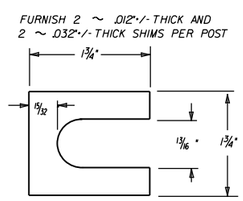
NOTE: BOLT HOLES,USED IN THE MOUNTING OF STANDARD SIGNS SHALL BE LOCATED IN THE FLANGE ADJACENT TO THE NEAR EDGE OF PAVEMENT FOR SINGLE POST ASSEMBLIES AND IN THE OUTSIDE FLANGES FOR MULTIPLE POST ASSEMBLIES.



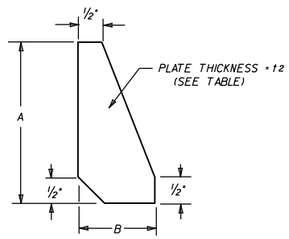
NOTE: POST SHALL BE SAW CUT AFTER GALVANIZING AND THE CUT SURFACE TREATED, AFTER PLATE IS INSTALLED AND ALL BOLTS FULLY TIGHTENED, WITH AN APPROVED ZINC SOLDER MEETING THE FEDERAL SPEC. O-G-93 (STICK ONLY).

STANDARD SIGNS GUIDE SIGNS

FUSE PLATE DETAILS



SHIM DETAIL



STIFFENER PLATE DETAIL

GENERAL NOTES

TIGHTEN THE HIGH STRENGTH BOLTS IN THE BASE CONNECTION ONLY TO THE TORQUE SHOWN. DO NOT OVERTIGHTEN.

BASE PLATES AND STIFFENER PLATES SHALL BE OF THE SAME MATERIAL AS THE PRIMARY SUPPORT POSTS WHICH THEY ARE WELDED.

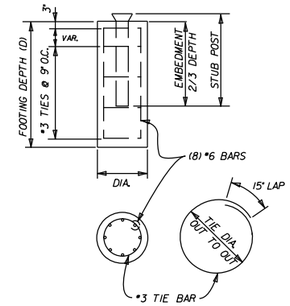
REFER TO THE PLANS FOR FOOTING DIMENSIONS.

EACH STUB POST AND SIGN POST SHALL HAVE A PERMANENT IDENTIFYING STAMP WHICH SPECIFIES THE STEEL SECTION USED. IF THE CONTRACTOR ELECTS TO SHIP THE STUB POST SEPARATE FROM THE SIGN POST A MATCH MARK SYSTEM WILL BE REQUIRED.

STEEL SCHEDULE

FOOTING DIAMETER	#3 TIE BARS		
	DIAMETER	BAR LENGTH	POUNDS
INCHES	INCHES	FEET	
18	12	4.39	1.65
24	18	5.96	2.24
30	24	7.53	2.83
36	30	9.1	3.42

FOOTINIG DEPTH	#6 STRAIGHT BARS		
	BAR LENGTH	NUMBER REQ'D.	POUNDS
FEET	FEET		
2.50	2.00	8	24.03
3.00	2.50	8	30.04
3.50	3.00	8	36.05
4.00	3.50	8	42.06
4.50	4.00	8	48.06
5.00	4.50	8	54.07
5.50	5.00	8	60.08
6.00	5.50	8	66.09
6.50	6.00	8	72.10
7.00	6.50	8	78.10
7.50	7.00	8	84.11
8.00	7.50	8	90.12



FOOTING QUANTITIES

FOOTINIG DEPTH	NUMBER TIE BARS REQ'D	18" DIAMETER		24" DIAMETER		30" DIAMETER		36" DIAMETER	
		CLASS S CONCRETE	REINF STEEL	CLASS S CONCRETE	REINF STEEL	CLASS S CONCRETE	REINF STEEL	CLASS S CONCRETE	REINF STEEL
FEET		CU. YD.	(GRADE 60)	CU. YD.	(GRADE 60)	CU. YD.	(GRADE 60)	CU. YD.	(GRADE 60)
2.50	4	0.16	31						
3.00	4	0.20	37						
3.50	5	0.23	44						
4.00	6	0.26	52	0.47	56				
4.50	6	0.29	58	0.52	62				
5.00	7	0.33	66	0.58	70	0.91	74		
5.50	8			0.64	78	1.00	83		
6.00	8			0.70	84	1.09	89	1.57	93
6.50	9					1.18	98	1.70	103
7.00	10					1.27	106	1.83	112
7.50	10							1.96	118
8.00	11							2.09	128

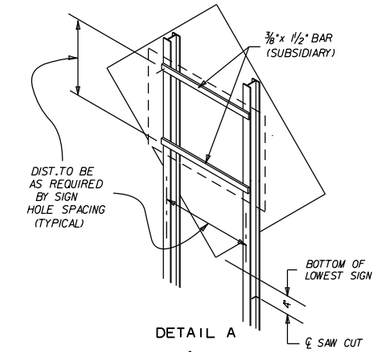
SIGN POST AND STUB POST

DATE	REVISION	FILMED
9-12-13	ISSUED	

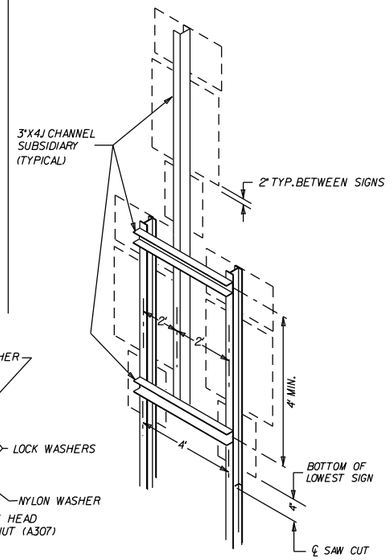
ARKANSAS STATE HIGHWAY COMMISSION

DETAIL OF BREAKAWAY SIGN SUPPORTS FOR GUIDE SIGNS

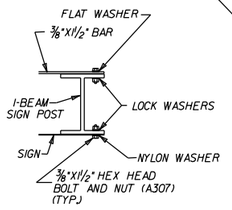
STANDARD DRAWING SHS-3



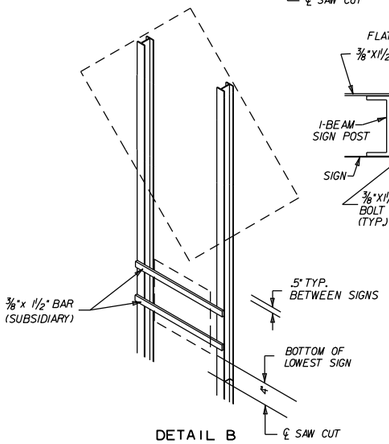
DETAIL A



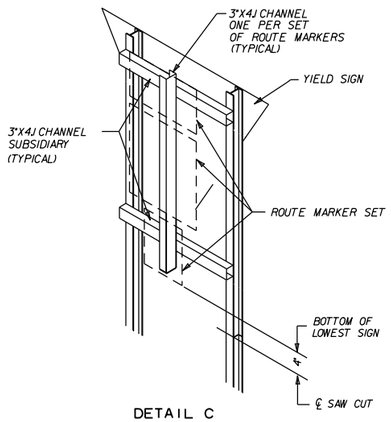
DETAIL D



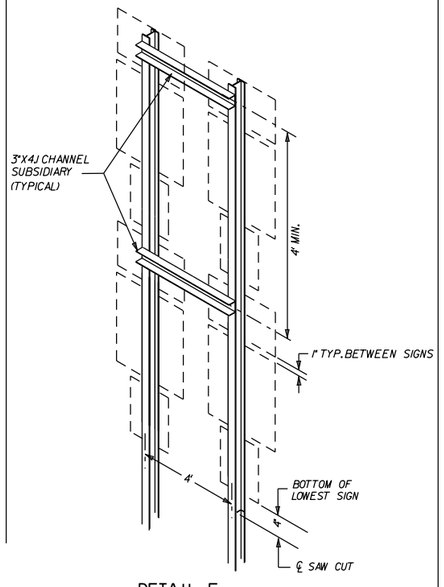
DETAIL F



DETAIL B



DETAIL C



DETAIL E

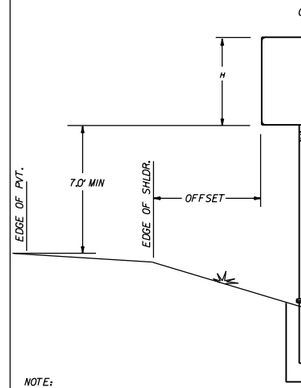
NOTE

ALL ADDITIONAL MOUNTING HARDWARE, BOLTS, NUTS, CHANNELS AND BAR STRAPS REQUIRED TO MOUNT SECONDARY SIGNS WILL BE CONSIDERED TO BE SUPPLEMENTAL TO THE MAIN SIGN SUPPORT SPECIFIED. PAYMENT WILL BE CONSIDERED SUBSIDIARY TO THE MAIN SUPPORT.

THE GALVANIZED STEEL CHANNEL AND BAR SUPPORTS MAY BE ASTM A-36.

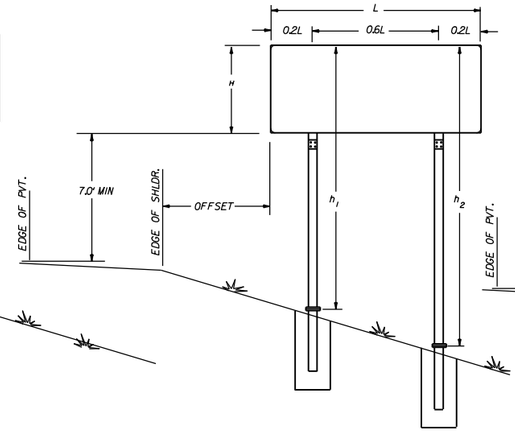
REFER TO THE P.C. RUTLEDGE FORMULA ON PAGE 58 OF THE AASHTO PUBLICATION "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS.

ALL BOLT HOLES SHALL BE 1/8" DIA. UNLESS OTHERWISE SHOWN.

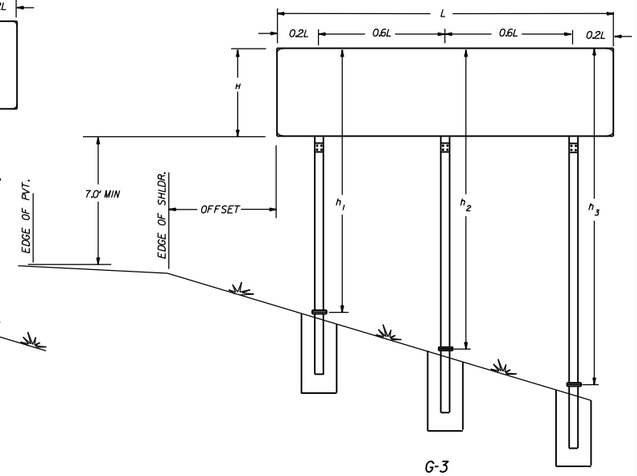


NOTE:
THE OFFSET WILL BE A MINIMUM OF 10' FROM THE EDGE OF PAVED SURFACE OR AS DIRECTED BY THE ENGINEER.

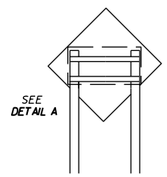
G-1



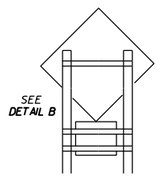
G-2



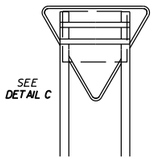
G-3



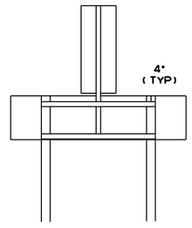
G2-1



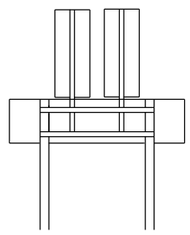
G2-2



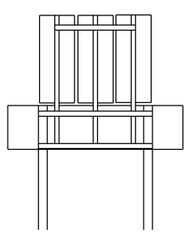
G2-3



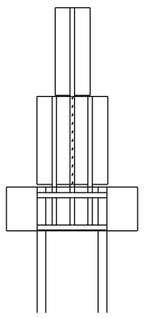
G2-4



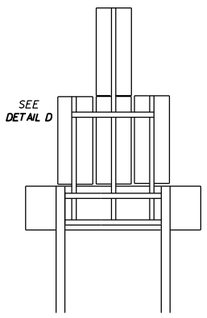
G2-5



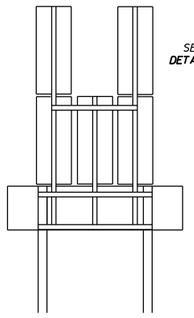
G2-6



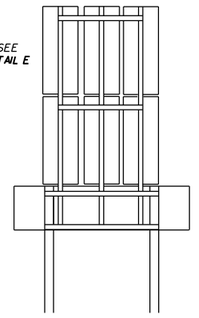
G2-7



G2-8



G2-9

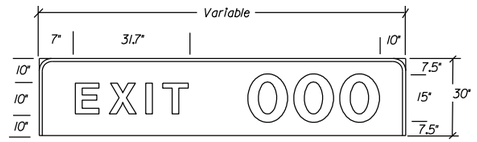


G2-10

			ARKANSAS STATE HIGHWAY COMMISSION
			DETAIL OF BREAKAWAY SIGN SUPPORTS FOR STANDARD SIGNS
9-12-13	ISSUED		STANDARD DRAWING SHS-4
DATE	REVISION	FILMED	

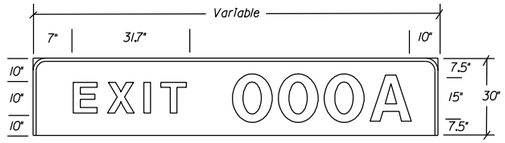
TYPICAL DETAIL

TYPE A



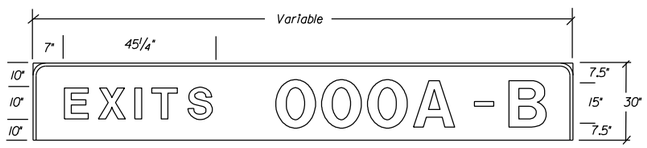
EXIT WITH 1 DIGIT 84"X30"=17.50 SF
EXIT WITH 2 DIGITS 96"X30"=20.0 SF
EXIT WITH 3 DIGITS 114"X30"=23.57 SF

TYPE B



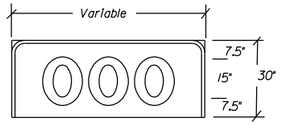
EXIT WITH 1 DIGIT PLUS "A"OR"B" 96"X30"=20.0 SF
EXIT WITH 2 DIGITS PLUS "A"OR"B" 114"X30"=23.57 SF
EXIT WITH 3 DIGITS PLUS "A"OR"B" 126"X30"=26.25 SF

TYPE C



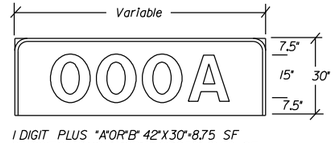
EXITS WITH 1 DIGIT PLUS "A"&"B" 132"X30"=27.50 SF
EXITS WITH 2 DIGITS PLUS "A"&"B" 150"X30"=31.25 SF
EXITS WITH 3 DIGITS PLUS "A"&"B" 168"X30"=35.00 SF

TYPE D



1 DIGIT 24"X30" =5.0 SF
2 DIGITS 42"X30" =8.75 SF
3 DIGITS 60"X30" =12.50 SF

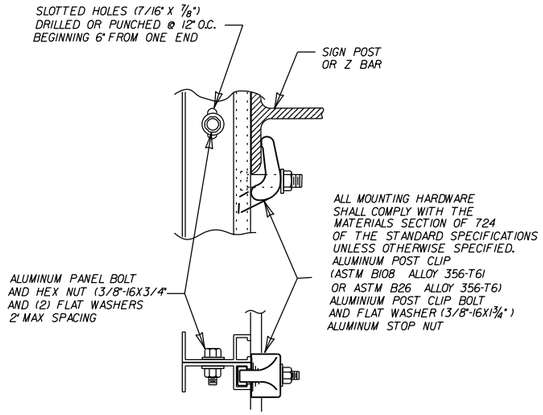
TYPE E

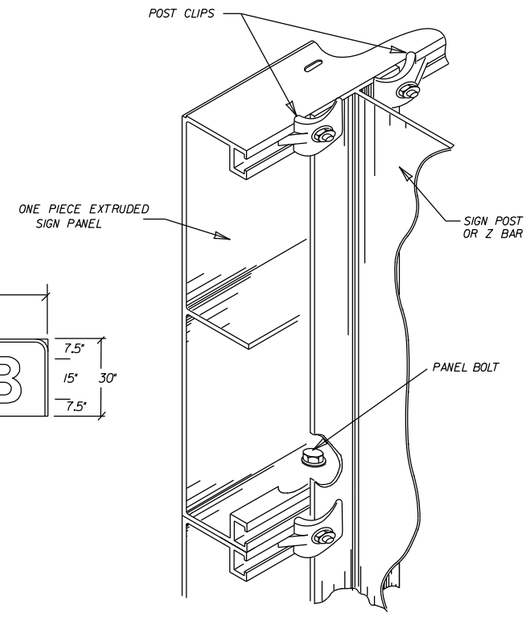


1 DIGIT PLUS "A"OR"B" 42"X30"=8.75 SF
2 DIGITS PLUS "A"OR"B" 60"X30"=12.50 SF
3 DIGITS PLUS "A"OR"B" 78"X30"=16.25 SF

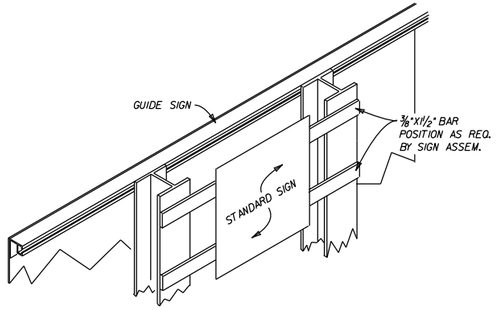
EXIT PANEL DETAILS

NOTE: EXIT NUMBER PANELS SHALL HAVE WHITE LEGENDS AND BORDERS. THE BACK GROUND COLOR WILL BE AS USE SPECIFIES. SHEETING TYPE WILL BE THE SAME AS THE GUIDE SIGN WHICH THE EXIT PANEL IS ATTACHED OR AS SPECIFIED IN THE PLANS. PAYMENT FOR ALL POST CLIPS, BOLTS, AND ANGLES SHALL BE SUBSIDIARY TO THE ITEM "EXIT NUMBER PANEL".

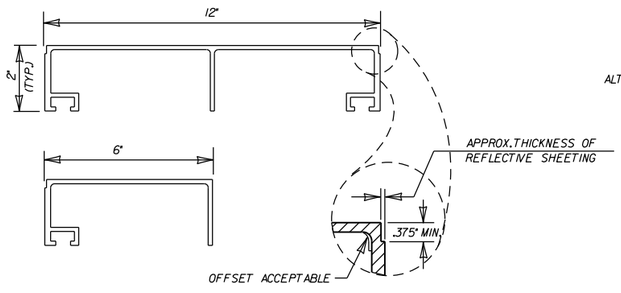




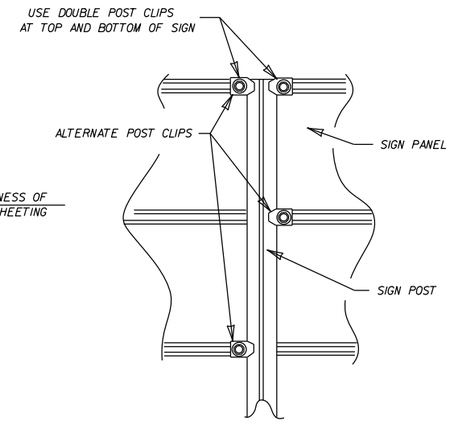
MOUNTING HARDWARE



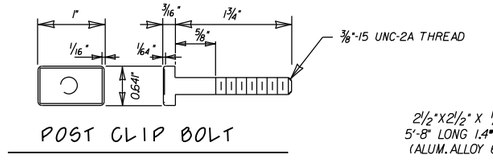
SECONDARY SIGN INSTALLATION ON BACKSIDE OF GUIDE SIGN



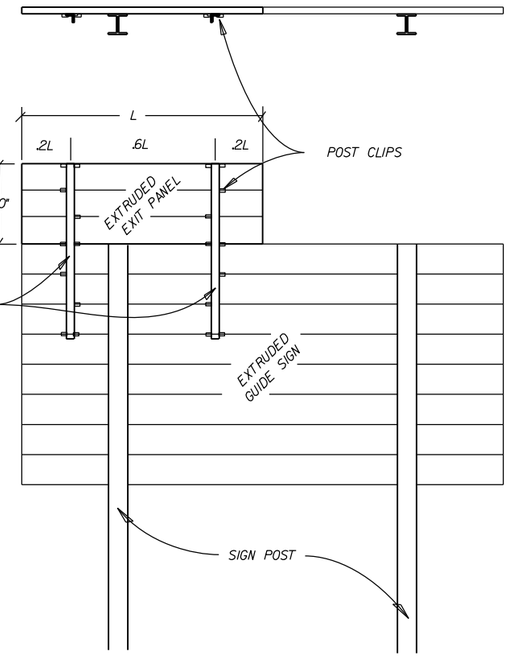
ONE PIECE EXTRUDED SIGN PANELS



POST CLIP PLACEMENT



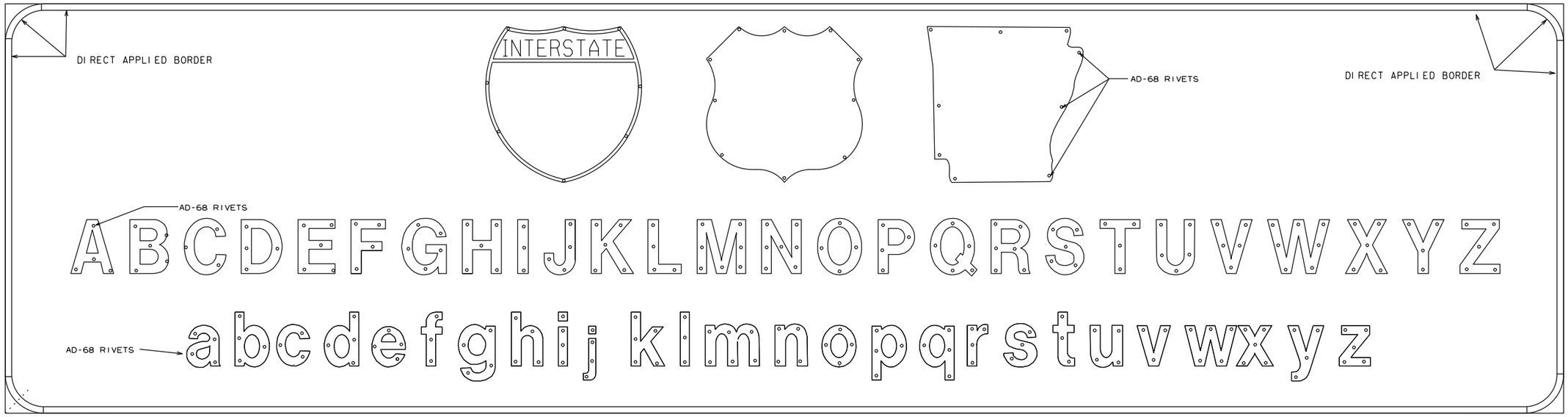
POST CLIP BOLT

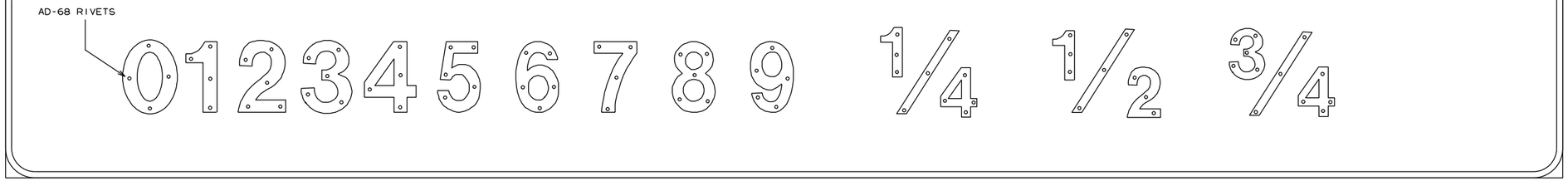


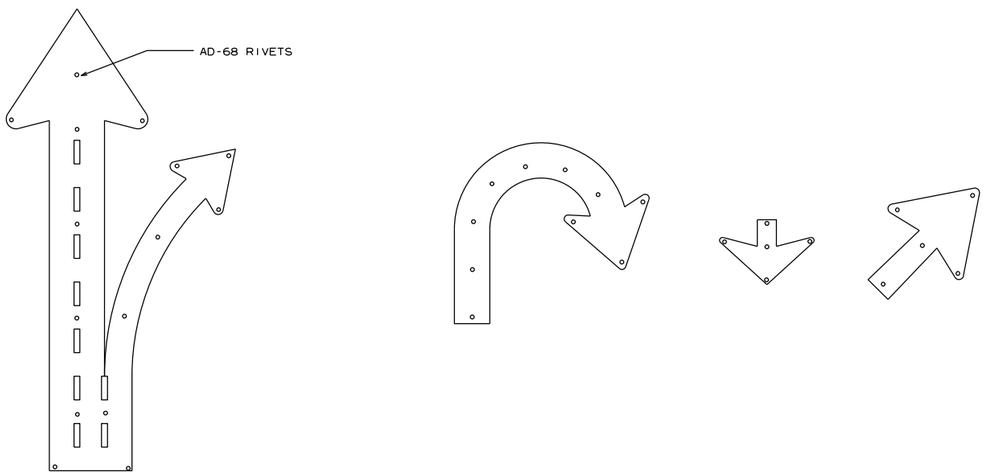
			ARKANSAS STATE HIGHWAY COMMISSION
			DETAILS OF GUIDE SIGN PANELS
9-12-13	ISSUED		STANDARD DRAWING SHS-5
DATE	REVISION	FILMED	

THE CONTRACTOR SHALL DRILL AND POP-RIVET LEGEND, SHIELDS, ARROWS, OR OTHER COPY AS SHOWN.

MOUNTING DETAILS FOR DEMOUNTABLE LEGEND ON GUIDE SIGNS







NOTES:

LEGEND ON GUIDE SIGNS ON THE MAIN LANES SHALL BE DEMOUNTABLE LEGEND.
LEGEND ON GUIDE SIGNS ON CROSS ROADS AND RAMPS SHALL BE DIRECT APPLIED.
THE DEMOUNTABLE AND DIRECT APPLIED LEGENDS SHALL BE TYPE IX SHEETING.

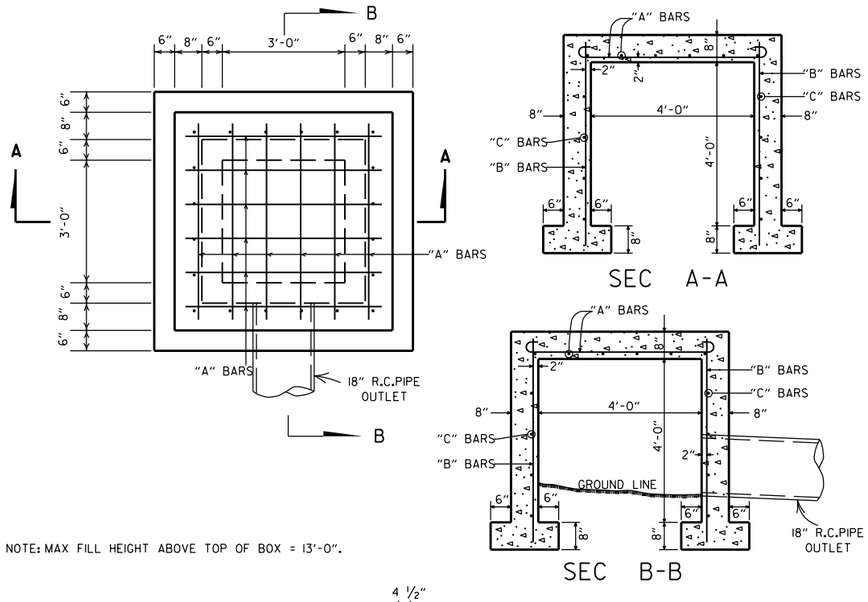
THE BACKGROUND ON ALL GUIDE SIGNS AND STANDARD SIGNS SHALL BE CONSTRUCTED USING TYPE III SHEETING.

TYPE IX SHEETING FOR BORDER, LEGEND, SHIELDS, ARROWS, OR OTHER COPY SHALL BE ORIENTED VERTICALLY AS PER MANUFACTURERS' DATUM MARKS, ORIENTATION MARKS, OR OTHER RECOMMENDATIONS.

SIGN LEGEND, SHIELDS, ARROWS OR OTHER COPY SHALL BE APPLIED WITH RIVETS ONLY.

NO OTHER METHOD OF APPLYING CHARACTERS IS ALLOWED.

			ARKANSAS STATE HIGHWAY COMMISSION
			MOUNTING DETAILS FOR DEMOUNTABLE LEGEND ON GUIDE SIGNS
9-12-13	ISSUED		STANDARD DRAWING SHS-6
DATE	REVISION	FILMED	

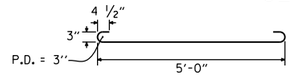


NOTE: MAX FILL HEIGHT ABOVE TOP OF BOX = 13'-0".

STEEL SCHEDULE

BARS	NUMBER	LENGTH	SPACING
"A"	12	6'-0"	10"
"B"	20	5'-0"	10 ½"
"C"	16	5'-0"	12"

ALL STEEL TO BE #4 BARS



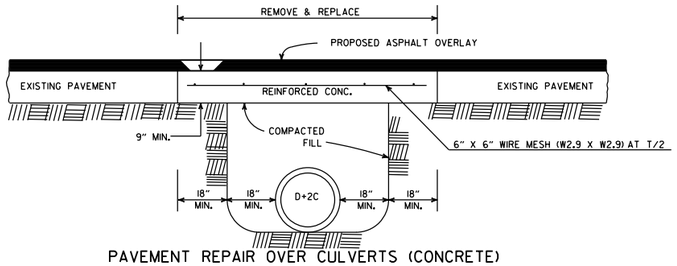
QUANTITIES

CONCRETE 3.31 CU. YDS.
REINFORCING STEEL 168 LB.

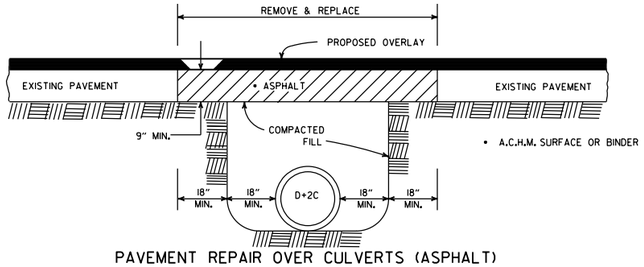
GENERAL NOTE:

THE PAY ITEMS FOR REINFORCED CONCRETE SPRING BOXES SHALL BE FOR THE QUANTITIES OF CONCRETE OF THE CLASS SPECIFIED, REINFORCING STEEL, EXCAVATION FOR STRUCTURES AND 18" R.C. PIPE CULVERT.

REINFORCED CONCRETE SPRING BOX



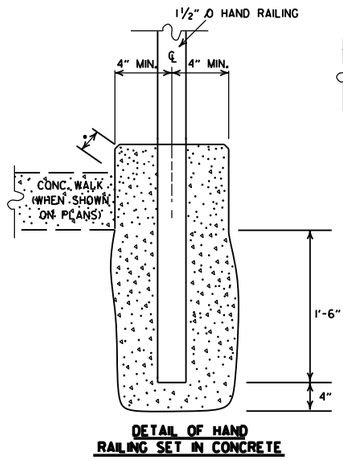
PAVEMENT REPAIR OVER CULVERTS (CONCRETE)



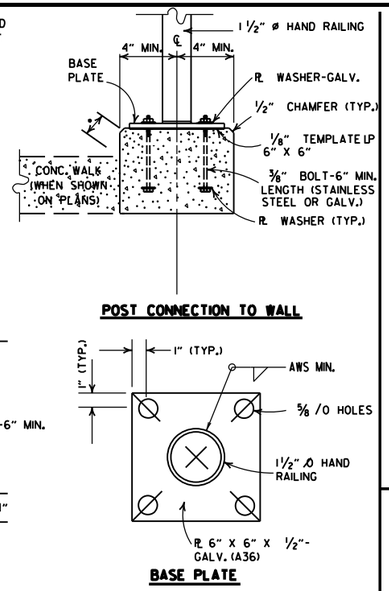
PAVEMENT REPAIR OVER CULVERTS (ASPHALT)

DETAIL SHOWING REPAIR OF EXISTING PAVEMENT AT CULVERT INSTALLATIONS

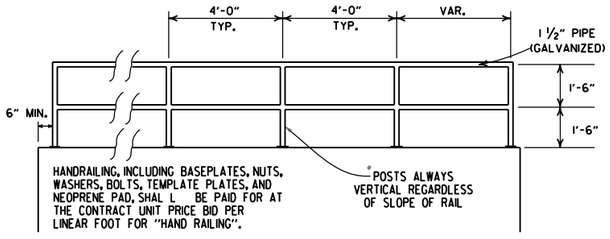
• A 2" MIN. HIGH CURB IS REQUIRED WHEN CONCRETE WALK IS ADJACENT TO THE HAND RAILING. PAYMENT FOR CURB SHALL BE CONSIDERED INCLUDED IN THE PRICE BID FOR CONCRETE WALKS.



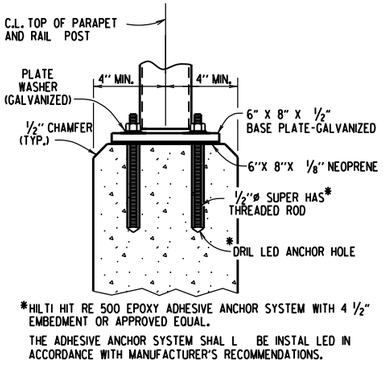
DETAIL OF HAND RAILING SET IN CONCRETE



POST CONNECTION DETAILS



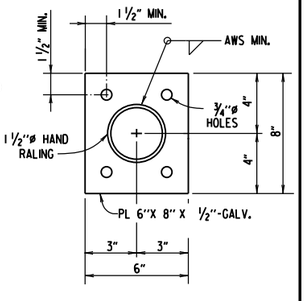
HAND RAILING SHALL CONFORM TO SECTION 633.



*HILTI HIT RE 500 EPOXY ADHESIVE ANCHOR SYSTEM WITH 4 ½" EMBEDMENT OR APPROVED EQUAL.

THE ADHESIVE ANCHOR SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

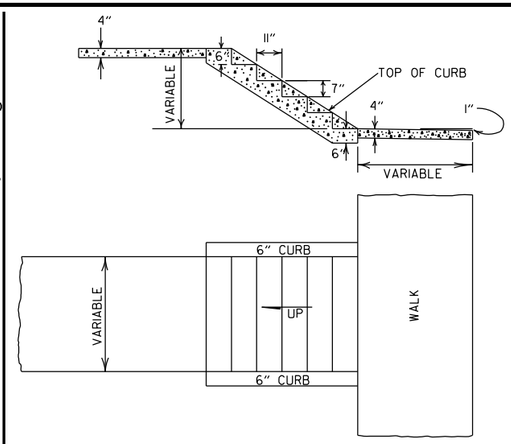
POST CONNECTION TO WALL



BASE PLATE

DETAILS OF ALTERNATE POST ANCHOR SYSTEM
(EPOXY ADHESIVE ANCHORS)

HAND RAILING DETAILS



GENERAL NOTES

1. RISE AND TREAD DIMENSIONS OF STEPS MAY BE VARIED AS DIRECTED BY THE ENGINEER, HOWEVER, TREAD WIDTHS SHALL BE 11" MIN. ALL STEPS IN A FLIGHT SHALL HAVE CONSISTENT TREAD & RISER DIMENSIONS.
2. 1" TRANSVERSE EXPANSION JOINTS SHALL BE PLACED IN CONCRETE WALKS AT 45' INTERVALS.

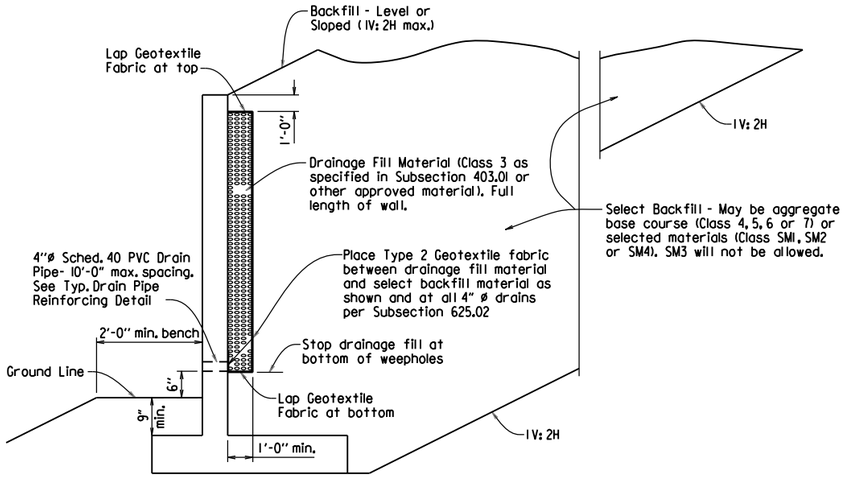
DETAILS OF CONCRETE STEPS & WALKS

9-12-13	REVISED REINFORCED CONCRETE SPRING BOX	
7-26-12	REMOVED RETAINING WALL DETAILS & REVISED HAND RAILING DETAILS	
4-17-08	REV. JOINT & FOOTING STEP DETAILS	
11-29-07	REVISED RETAINING WALL DRAINAGE	
5-25-06	REVISED PVMT REPAIR OVER CULVERTS (CONC); REVISED REINFORCED CONC SPRING BOX	
10-9-03	REVISED PIPE RAILING DETAILS TO HAND RAILING DETAILS	
4-10-03	REVISED RETAINING WALL DRAWING	
8-22-02	ADDED HAND RAILING DETAIL	
11-16-01	REVISED PVMT REPAIR OVER CULVERTS (CONC); CORRECTED SPELLING IN GENERAL NOTES	
11-18-98	ADDED GENERAL NOTES TO CONCRETE STEPS & WALKS	
7-02-98	ENLARGED PIPE	
4-03-97	ADDED NOTE TO STEEL BAR SCHED.	
10-18-96	CORRECTED SPELLING	
4-26-94	ADD WEEP HOLE;REV. JOINT SPACING IN RET. WALL	
6-2-94	CHANGED CONST. TO CONTRACTION JOINT	
10-1-92	CHANGED MESH FABRIC TO WIRE MESH	10-1-92
8-15-91	DELETED HDWL MODIFICATION DETAIL	8-15-91
11-8-90	DELETED COLD MIX FROM CULV'T. REPAIR	11-8-90
11-30-89	REV. RETAINING WALL STEEL SCHEDULE	11-30-89
11-17-88	V. BARS BEHIND ARROW	665-11-17-88
7-15-88	REV. PAVEMENT REPAIR ADDED HDWL. MODS, DEL. PIPE UNDERDRAINS	649-7-15-88
11-1-84	REV. TRENCH FOR PIPE UNDERDRAIN	510-11-1-84
1-4-83	ELIMINATED CONC. CLASS & ADDED CHAMFER NOTE	682-1-4-83
3-2-81	SPELLING OF "UNDERDRAIN"	721-3-2-81
4-20-79	REV. UNDERDRAIN DET& PAVEMENT REPAIR	674-4-20-79
2-2-76	12"MIN. GRAN. MAT'L. OVER PIPE	919-2-2-76
4-10-75	REM. SPECS. FOR GRAN. MAT'L.	568-4-10-75-853
5-22-74	GRANULAR MAT'L. TO BE SB-3	567-5-22-74-740
10-2-72	REVISED AND REDRAWN	564-10-16-72
DATE	REVISION	DATE FILMED

ARKANSAS STATE HIGHWAY COMMISSION

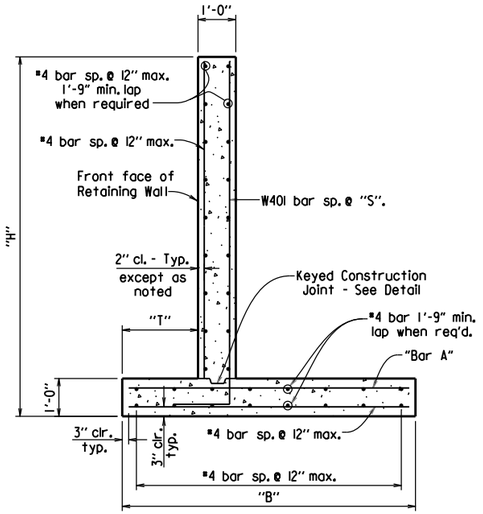
DETAILS OF SPECIAL ITEMS

STANDARD DRAWING SI - 1



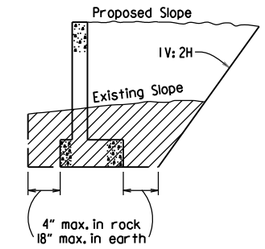
TYPICAL DRAINAGE & BACKFILL DETAILS

N.T.S

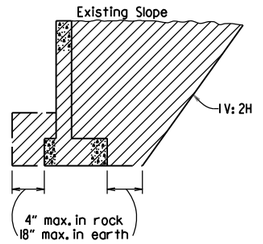


TYPICAL SECTION

N.T.S



In Embankment



In Excavation

NOTE: Hatched area denotes maximum limits of pay excavation.

DETAILS OF EXCAVATION

N.T.S

GENERAL NOTES

CONSTRUCTION SPECIFICATIONS: Arkansas state Highway and Transportation Department Standard Specifications for Highway Construction (Current Edition) with applicable supplemental specifications and special provisions. Unless otherwise noted in the plans, Section and Subsection refer to the Standard Construction Specifications.

DESIGN SPECIFICATIONS: AASHTO LRFD Bridge Design Specifications, Sixth Edition (2012).

LIVE LOAD: Live Load Surcharge is not included in the design of these walls. Vehicular Live Load shall not be allowed within a distance equal to one-half the height of the wall.

CONCRETE: Concrete shall be poured in the dry and all exposed corners to be chamfered ½". All concrete shall be Class S with a minimum 28 day compressive strength f'c = 3,500 psi. A Class 2 Surface finish shall be used on all surfaces of the concrete unless otherwise noted.

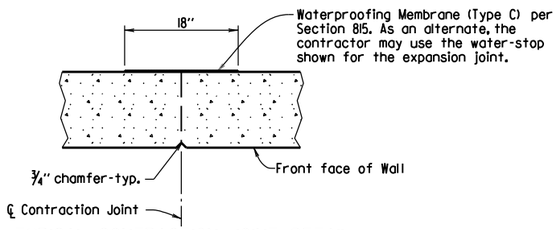
REINFORCING STEEL: All reinforcing steel shall conform to AASHTO M31 orM53, Grade 60.

Foundations for footings shall be prepared in accordance with subsection 801.04. Backfill for retaining walls shall be in accordance with subsection 801.08.

Waterproof Membrane (Type C), waterstops, preformed joints, weep holes & geotextile fabric shall not be paid for directly, but shall be considered subsidiary to Class S Concrete.

Drainage fill material (Class 3) and select backfill shall be measured and paid for as Compacted Embankment.

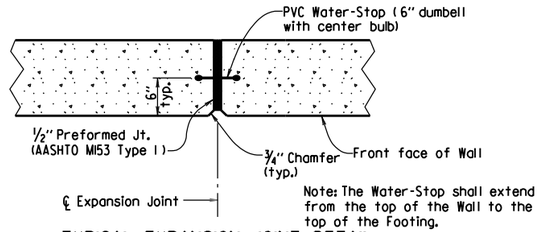
These details are not intended for use along streams or ditches without consideration for scour.



TYPICAL CONTRACTION JOINT DETAIL

N.T.S.

Note: 20'-0" Max. Spacing between Contraction Joints. Horizontal reinforcement shall be continuous through Contraction joints.

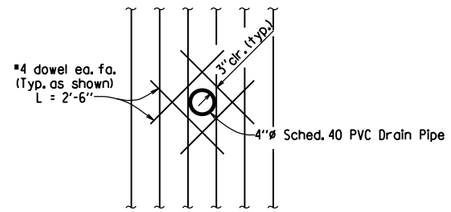


Note: The Water-Stop shall extend from the top of the Wall to the top of the Footing.

TYPICAL EXPANSION JOINT DETAIL

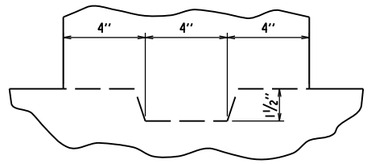
N.T.S.

Note: 60'-0" Max. Spacing between Expansion Joints. Horizontal reinforcing shall stop 2" from ℄ Expansion Joint.



TYPICAL DRAIN PIPE REINFORCING DETAIL

N.T.S



KEYED CONSTRUCTION JOINT DETAIL

N.T.S

SEISMIC ZONE: These walls have been designed for the following site adjusted peak ground accelerations (A_S):
Level Backfill - $A_S \leq .40g$
Sloped Backfill (1V: 2H max.) - $A_S \leq .30g$

TABLE OF RETAINING WALL VARIABLES (LEVEL BACKFILL)

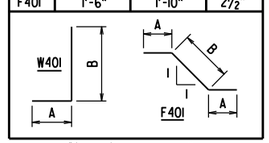
"H"	"T"	"B"	"S"	"Bar A" Size @ Spacing
3'-0"	9"	2'-6"	12"	#4 @ 12"
4'-0"	9"	3'-6"	12"	#4 @ 12"
5'-0"	9"	4'-0"	12"	#4 @ 12"
6'-0"	9"	4'-6"	12"	#4 @ 12"
7'-0"	9"	5'-6"	12"	#4 @ 10"
8'-0"	9"	6'-0"	12"	#5 @ 10"
9'-0"	1'-0"	7'-0"	12"	#5 @ 6½"

TABLE OF RETAINING WALL VARIABLES (SLOPED BACKFILL) (1V: 2H MAX.)

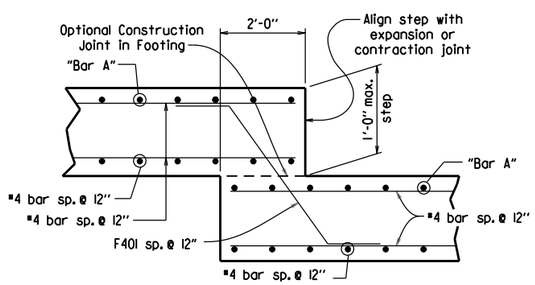
"H"	"T"	"B"	"S"	"Bar A" Size @ Spacing
3'-0"	9"	2'-6"	12"	#4 @ 12"
4'-0"	9"	3'-6"	12"	#4 @ 12"
5'-0"	9"	4'-6"	12"	#4 @ 12"
6'-0"	9"	5'-6"	12"	#4 @ 6"
7'-0"	9"	6'-6"	12"	#5 @ 6½"
8'-0"	1'-6"	8'-0"	7½"	#6 @ 6"
9'-0"	1'-11"	9'-6"	5"	#8 @ 6"

BENDING DIAGRAMS

MARK	A	B	P.D.
W401	8"	"H" - 6"	3"
F401	1'-6"	1'-10"	2½"



Dimensions are out to out of bars.



FOOTING STEP DETAIL

N.T.S.

DATE	REVISION
2-27-14	REVISED GENERAL NOTES.
7-26-12	DRAWING ISSUED

ARKANSAS STATE HIGHWAY COMMISSION

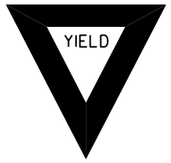
REINFORCED CONCRETE RETAINING WALL (WITHOUT LIVE LOAD SURCHARGE)

STANDARD DRAWING SI - 2

R1-1

STANDARD 30"X30"
EXPRESSWAY 36"X36"
SPECIAL 48"X48"

R1-2



STD. 36"X36"X36"
EXPWY. 48"X48"X48"
FWY. 60"X60"X60"

R2-1

STD. 24"X30"
EXPWY. 36"X48"
FWY. 48"X60"

R2-5A

STD. 24"X30"
EXPWY. 36"X48"
FWY. 48"X60"

R2-5C

STD. 24"X30"
EXPWY. 36"X48"
FWY. 48"X60"

R4-1

STD. 24"X30"
EXPWY. 36"X48"
FWY. 48"X60"

R4-2

STD. 24"X30"
EXPWY. 36"X48"
FWY. 48"X60"

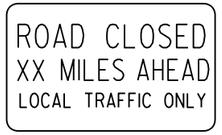
R5-1

STD. 30"X30"
EXPWY. 36"X36"
SPECIAL 48"X48"

RII-2

48"X30"

RII-3A



60"X30"

RII-4

60"X30"

RSP-1

48"X30"

WI-1

STD. 36"X36"
FWY. 48"X48"

WI-2

STD. 36"X36"
FWY. 48"X48"

WI-3

STD. 48"X48"

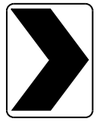
WI-4

STD. 48"X48"

WI-6

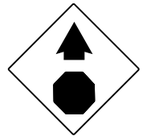
STD. 48"X24"
SPECIAL 60"X30"

WI-8



STD. 18"X24"
SPECIAL 24"X30"
EXPWY. 30"X36"
FWY. 36"X48"

W3-1

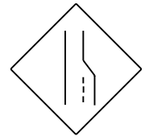


STD. 36"X36"
SPECIAL 48"X48"

W3-2

STD. 36"X36"
SPECIAL 48"X48"

W4-2



STD. 36"X36"
FWY. 48"X48"

W5-1

STD. 36"X36"
SPECIAL 48"X48"

W6-3

EXPWY. 36"X36"
SPECIAL 48"X48"

W8-7

EXPWY. 36"X36"
FWY. 48"X48"

W9-2

STD. 36"X36"
FWY. 48"X48"

WI3-1

STD. 24"X24"

W20-1

STD. 48"X48"

W20-2

STD. 48"X48"

W20-3

STD. 48"X48"

W20-4

STD. 48"X48"

W20-5

STD. 48"X48"

W20-7a

STD. 36"X36"
FWY. 48"X48"

W21-2

STD. 30"X30"
SPECIAL 36"X36"

W21-5

STD. 30"X30"
SPECIAL 36"X36"

W24-1

STD. 36"X36"

WI-4b

STD. 48"X48"

R56-1

STD. 18"X18"

W8-11

STD. 36"X36"
FWY. 48"X48"

W8-9

STD. 36"X36"
FWY. 48"X48"

G20-1

60"X24"

G20-2

48"X24"

OM-3L OM-3R

12"X36"

M4-9

STD. 30"X24"
SPECIAL 48"X36"
SPECIAL 60"X48"

M4-10

48"X18"

R55-1

36"X60"

• USE 6" C LETTERS
•• USE 4" D LETTERS

ADVANCE DISTANCES
(XXXX)

500 FT	½ MILE
1000 FT	¾ MILE
1500 FT	1 MILE
	AHEAD

GENERAL NOTES:

1. ALL TRAFFIC CONTROL DEVICES USED ON ROAD CONSTRUCTION SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION, AND TO THE STANDARD HIGHWAY SIGNS, LATEST EDITION, OR AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION.
2. TRAFFIC CONTROL DEVICES SHALL BE SET UP JUST BEFORE THE START OF CONSTRUCTION OPERATIONS AND SHALL BE PROPERLY MAINTAINED DURING THE TIME SUCH CONDITIONS EXIST. THEY SHALL REMAIN IN PLACE ONLY AS LONG AS NEEDED AND REMOVED THEREAFTER.
3. EXISTING SIGNS AND CONSTRUCTION SIGNS SHALL BE KEPT IN PROPER POSITION, AND BE CLEAN AND LEGIBLE AT ALL TIMES. SIGNS THAT DO NOT APPLY TO EXISTING CONDITIONS SHALL BE REMOVED. SIGNS THAT ARE DAMAGED, DEFACED, OR THAT ACCUMULATE DIRT DURING CONSTRUCTION SHALL BE CLEANED, REPAIRED, OR REPLACED.
- 4. SIGNS ARE USUALLY MOUNTED ON A SINGLE POST, ALTHOUGH THOSE WIDER THAN 36" OR LARGER THAN 10 SQ. FT. SHALL BE MOUNTED ON TWO POSTS OR ABOVE A TYPE III BARRICADE.
- 5. SIGN POSTS DIRECT BURIED IN SOIL SHALL BE 2 LB. MINIMUM CHANNEL POST OR 4"x4" WOOD POSTS. CHANNEL POSTS SHALL BE PAINTED GREEN. WOOD POSTS SHALL BE PAINTED WHITE. ALL POSTS SHALL BE NEATLY CONSTRUCTED, AND SHALL BE REPLUMBED, CLEANED, OR REPAIRED AS NEEDED FOR THE DURATION OF THE JOB. THERE SHALL NOT BE MORE THAN 2 POSTS IN A 7' PATH FOR WOOD OR CHANNEL POSTS. ANY CHANNEL POST SPLICE SHALL BE IN ACCORDANCE WITH STANDARD DRAWING TC-3.
6. POST MOUNTED SIGNS IN RURAL AREAS SHALL BE CONSTRUCTED WITH THE NEAR EDGE OF THE SIGN FROM 6 TO 12 FEET FROM THE PAVEMENT EDGE. SIGNS IN URBAN AREAS AND BARRICADE MOUNTED SIGNS SHALL BE MOUNTED A MINIMUM OF 2 FEET FROM THE PAVEMENT EDGE.
7. ALL POST AND BARRICADE MOUNTED SIGNS MOUNTED IN URBAN AREAS SHALL BE MOUNTED A MINIMUM DISTANCE OF 7' FROM THE BOTTOM OF THE SIGN TO THE ROADWAY SURFACE. ALL POST AND BARRICADE MOUNTED SIGNS MOUNTED IN RURAL AREAS SHALL BE MOUNTED A MINIMUM DISTANCE OF 7' FROM THE BOTTOM OF THE SIGN TO THE ROADWAY SURFACE, EXCEPT A MINIMUM OF 6' SHALL BE USED WHEN MOUNTING AN ADVISORY SIGN BELOW A WARNING SIGN. TEMPORARY SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS FOR INTERMEDIATE TERM STATIONARY WORK CONDITIONS. THE SIGNS MINIMUM MOUNTING HEIGHT SHALL BE 5'. RETROREFLECTIVE DEVICES SHALL BE USED. TEMPORARY SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS FOR SHORT-TERM, SHORT DURATION, AND MOBILE CONDITIONS. THEY SHALL BE NO LESS THAN ONE (1) FOOT ABOVE THE TRAVELED WAY. LONG-TERM STATIONARY SIGNS SHALL BE DIRECT BURIED IN SOIL, UNLESS CONDITIONS NECESSITATE THE USE OF PORTABLE SIGNS, OR AS APPROVED BY THE ENGINEER. CONCRETE PADS, CONCRETE OR ROCK BALLAST, OR OTHER SOLID MATERIALS SHALL NOT BE UTILIZED WITH PORTABLE SIGN SUPPORTS.
8. FLAGGERS SHALL USE REFLECTORIZED STOP-SLOW PADDLES. FLAGS MAY BE USED ONLY FOR EMERGENCY SITUATIONS.
9. MOST OF THE SIGNS SHOWN ARE ORIENTED TO THE RIGHT. HOWEVER, THIS DOES NOT PRECLUDE THE USE OF MIRROR IMAGES OF THESE SIGNS WHERE THE REVERSE ORIENTATION MIGHT BETTER CONVEY TO MOTORISTS THE PROPER DIRECTION OF MOVEMENT.
10. R55-1 SIGNS SHALL BE PLACED AT LEAST 1500' BUT NOT MORE THAN 1 MILE IN ADVANCE OF THE WORK ZONE. IF A SPEED LIMIT REDUCTION IS IN EFFECT, THE SIGN SHALL BE PLACED A MINIMUM OF 500' IN ADVANCE OF THE "REDUCED SPEED AHEAD" SIGN.

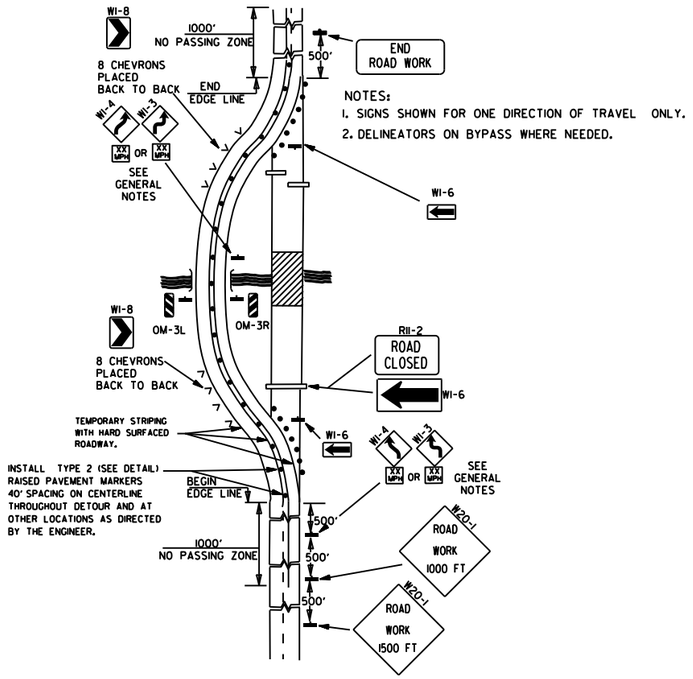
• NOTE: SUPPORTS FOR SIGNS, BARRICADES, AND VERTICAL PANELS THAT ARE DIFFERENT FROM THE REQUIREMENTS SHOWN IN NOTES 4 & 5, BUT MEET THE REQUIREMENTS OF NCHRP-350 OR MANUAL FOR ASSESSING SAFETY HARDWARE (MASH), WILL BE ACCEPTED. COMPLIANCE WITH THE REQUIREMENTS OF NCHRP-350 OR MANUAL FOR ASSESSING SAFETY HARDWARE (MASH) IS REQUIRED FOR ALL PROJECTS.

DATE	REVISION	FILMED
12-15-11	REVISED W24-1	
11-17-10	DELETED W8-9a & ADDED W8-9	
10-15-09	ADDED REFERENCE TO MASH & ADDED SIGN W24-1	
4-17-08	REVISED SIGN DESIGNATIONS	
11-18-04	REVISED NOTES	
10-9-03	REVISED NOTE 1	
11-16-01	REVISED NOTE 7	
9-28-00	REVISED NOTE	
11-18-98	ADDED NOTE	
6-26-97	REVISED NOTE 5	
4-03-97	REVISED NOTE 5	
10-18-96	ADDED CONTROLLED ACCESS HWY. SIGN & TO NOTE 7	
10-12-95	ADDED R55-1	
6-8-95	REVISED TO CORRECT SIGN ILLUSTRATIONS	6-8-95
2-2-95	REVISED PER PART VI, MUTCD SEPT. 3, 1993	
8-15-91	DRAWN AND PLACED IN USE	

ARKANSAS STATE HIGHWAY COMMISSION

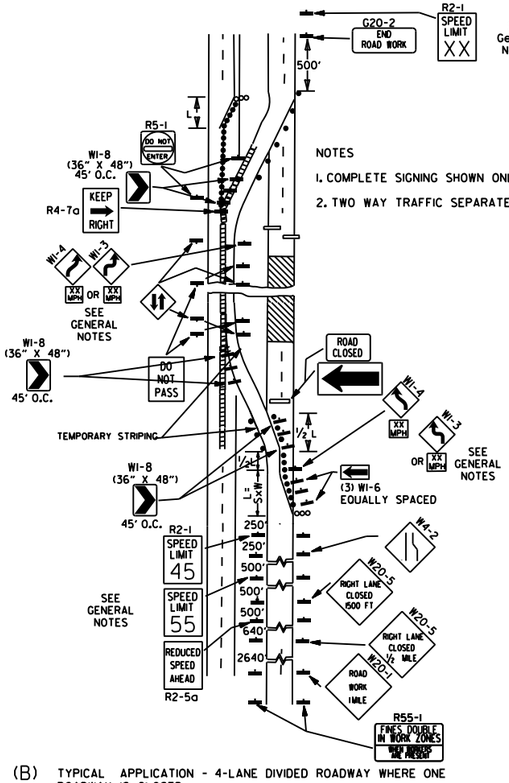
STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION

STANDARD DRAWING TC-1



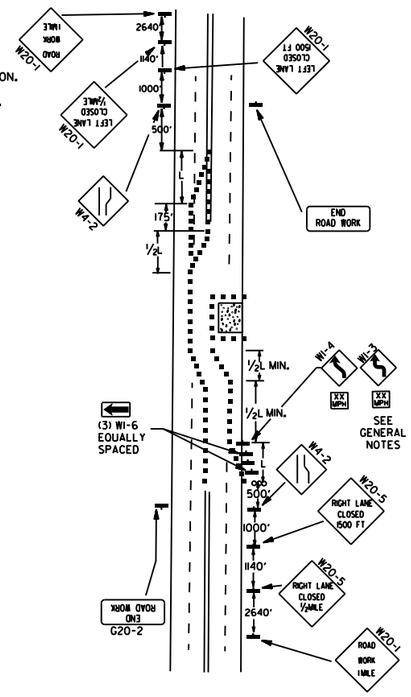
NOTES:
1. SIGNS SHOWN FOR ONE DIRECTION OF TRAVEL ONLY.
2. DELINEATORS ON BYPASS WHERE NEEDED.

(A) TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES ON A 2-LANE HIGHWAY WHERE THE ENTIRE ROADWAY IS CLOSED AND A BYPASS DETOUR IS PROVIDED.

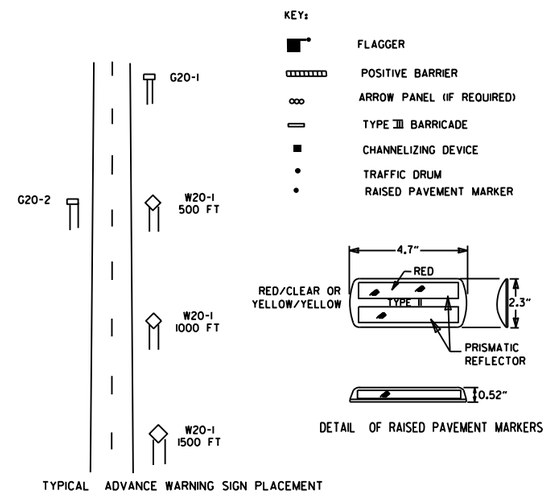


NOTES
1. COMPLETE SIGNING SHOWN ONLY IN CROSSOVER DIRECTION.
2. TWO WAY TRAFFIC SEPARATED WITH POSITIVE BARRIER.

(B) TYPICAL APPLICATION - 4-LANE DIVIDED ROADWAY WHERE ONE ROADWAY IS CLOSED.

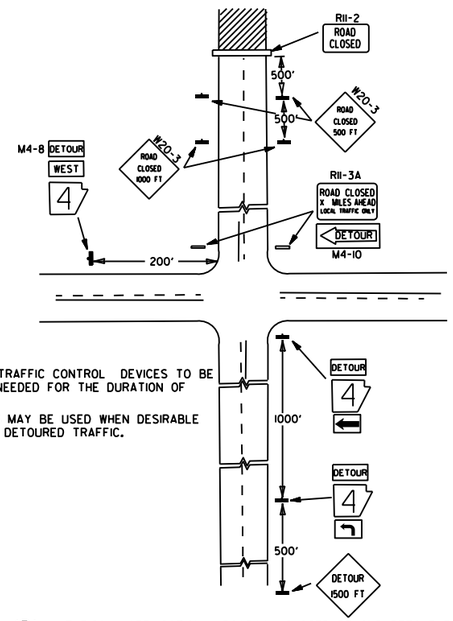


(C) TYPICAL APPLICATION - 4-LANE UNDIVIDED ROADWAY WHERE HALF OF THE ROADWAY IS CLOSED.



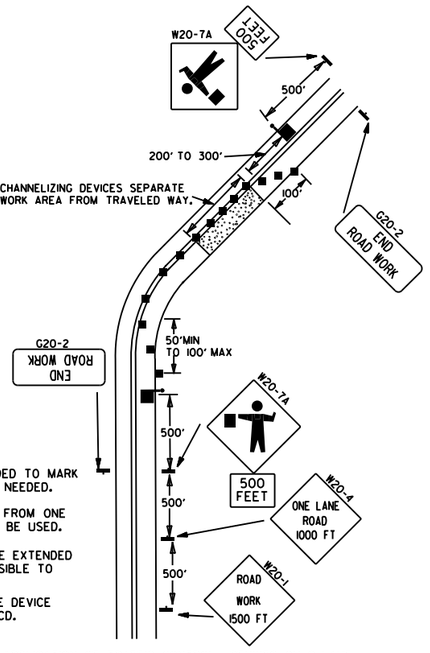
TYPICAL ADVANCE WARNING SIGN PLACEMENT

DETAIL OF RAISED PAVEMENT MARKERS



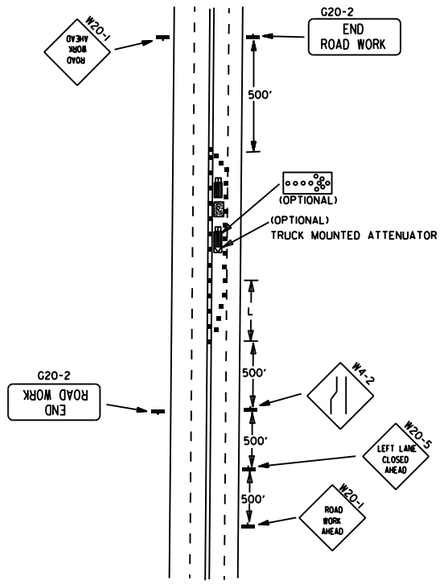
NOTES:
1. REGULATORY TRAFFIC CONTROL DEVICES TO BE MODIFIED AS NEEDED FOR THE DURATION OF THE DETOUR.
2. STREET NAMES MAY BE USED WHEN DESIRABLE FOR DIRECTING DETOURED TRAFFIC.

(D) TYPICAL APPLICATION - ROADWAY CLOSED BEYOND DETOUR POINT.



NOTES:
1. FLOOD LIGHTS SHOULD BE PROVIDED TO MARK FLAGGER STATIONS AT NIGHT AS NEEDED.
2. IF ENTIRE WORK AREA IS VISIBLE FROM ONE STATION, A SINGLE FLAGGER MAY BE USED.
3. CHANNELIZING DEVICES ARE TO BE EXTENDED TO A POINT WHERE THEY ARE VISIBLE TO APPROACHING TRAFFIC.
4. AUTOMATED FLAGGER ASSISTANCE DEVICE (AFAD) OPTIONAL. REFER TO MUTCD.

(E) TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES ON 2-LANE HIGHWAY WHERE ONE LANE IS CLOSED AND FLAGGING IS PROVIDED.



(F) TYPICAL APPLICATION - 4-LANE UNDIVIDED ROADWAY WITH INSIDE LANE CLOSED.

TAPER FORMULAE:

L=SXW FOR SPEEDS OF 45MPH OR MORE.

$L = \frac{WS^2}{60}$ FOR SPEEDS OF 40MPH OR LESS.

WHERE:

L= MINIMUM LENGTH OF TAPER.

S= NUMERICAL VALUE OF POSTED SPEED LIMIT PRIOR TO WORK OR 85TH PERCENTILE SPEED.

W= WIDTH OF OFFSET.

GENERAL NOTES:

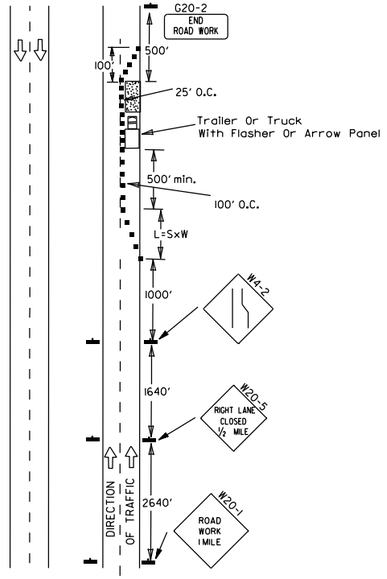
1. ADVISORY SPEED POSTED ON W1-3 OR W1-4 CURVE WARNING SIGNS TO BE DETERMINED AT SITE. USE W1-4 WHEN SPEED IS GREATER THAN 30MPH AND W1-3 WHEN 30MPH OR LESS.
2. WHEN THE EXISTING SPEED LIMIT IS 55MPH AND THE PLANS REQUIRE A SPEED LIMIT OF 45MPH, THE R2-1(55) SHALL BE OMITTED AND THE R2-5A SHALL BE INSTALLED AT THAT LOCATION. ADDITIONAL R2-1 45MPH SPEED LIMIT SIGNS SHALL BE INSTALLED AT A MAXIMUM OF 1MILE INTERVALS. AT THE END OF THE WORK AREA A R2-1(XX) SHALL BE INSTALLED TO MATCH ORIGINAL SPEED LIMIT.
3. WHEN THE EXISTING SPEED LIMIT IS 65MPH AND THE PLANS REQUIRE A SPEED LIMIT OF 55MPH, THE R2-1(45) SHALL BE OMITTED. ADDITIONAL R2-1 55MPH SPEED LIMIT SIGNS SHALL BE INSTALLED AT A MAXIMUM OF 1MILE INTERVALS. AT THE END OF THE WORK AREA A R2-1(XX) SHALL BE INSTALLED TO MATCH ORIGINAL SPEED LIMIT.
4. THE MAXIMUM SPACING BETWEEN CHANNELIZING DEVICES IN A TAPER SHOULD BE APPROXIMATELY EQUAL IN FEET TO THE SPEED LIMIT. BEYOND THE TAPER, MAXIMUM SPACING SHALL BE TWO TIMES THE SPEED LIMIT, OR AS DIRECTED BY THE ENGINEER.
5. WARNING LIGHTS AND/OR FLAGS MAY BE MOUNTED TO SIGNS OR CHANNELIZING DEVICES AT NIGHT AS NEEDED.
6. PAVEMENT MARKINGS NO LONGER APPLICABLE WHICH MIGHT CREATE CONFUSION IN THE MINDS OF VEHICLE OPERATORS SHALL BE REMOVED OR OBLITERATED AS SOON AS PRACTICABLE.
7. TRAILER MOUNTED DEVICES SUCH AS ARROW PANELS AND PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE DELINEATED BY AFFIXING CONSPICUITY MATERIAL IN A CONTINUOUS LINE ON THE FACE OF THE TRAILER. WHEN PLACED ON OR ADJACENT TO THE SHOULDER AND NOT BEHIND A POSITIVE BARRIER, THESE DEVICES SHALL BE DELINEATED BY PLACING FIVE (5) TRAFFIC DRUMS, EQUALLY SPACED ALONG THE TRAFFIC SIDE OF THE DEVICE.

DATE	REVISION	FILMED
9-12-13	REVISED DETAIL OF RAISED PAVEMENT MARKERS	
3-11-10	ADDED (AFAD)	
11-20-08	REVISED SIGN DESIGNATIONS	
11-18-04	ADDED GENERAL NOTE	
10-18-96	ADDED R55-1	
4-26-96	CORRECTED (a) BEHIND G20-2	
6-8-95	CORRECTED SIGN IDENT. ON W1-4A	6-8-95
2-2-95	REVISED PER PART VI, MUTCD, SEPT. 3, 1993	
8-15-91	DRAWN AND PLACED IN USE	

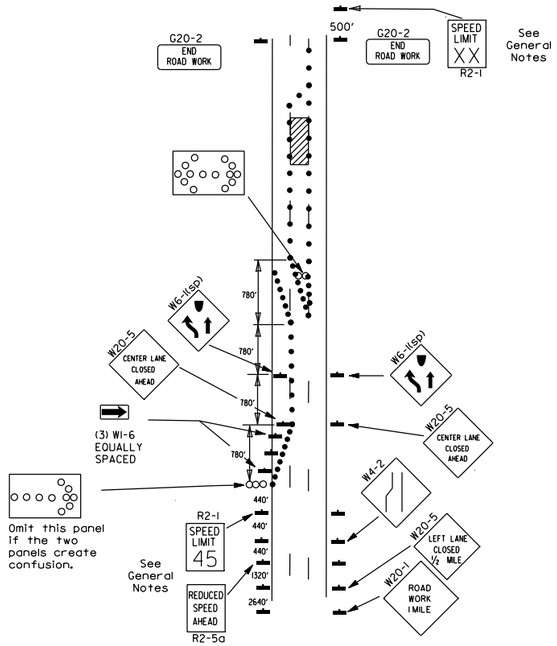
ARKANSAS STATE HIGHWAY COMMISSION

STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION

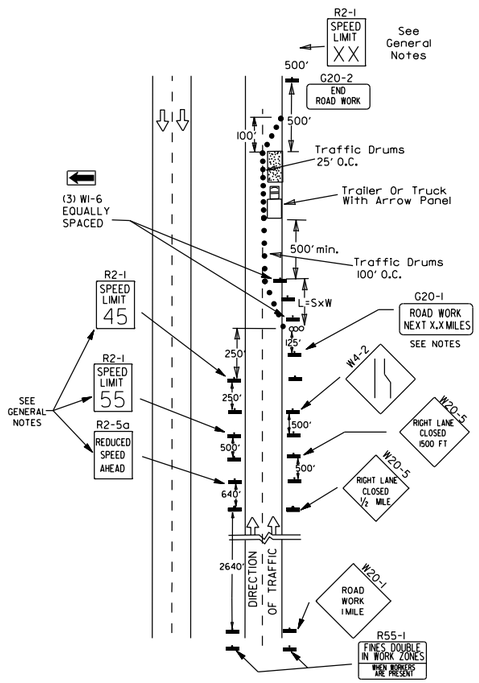
STANDARD DRAWING TC-2



(A) Typical application - daytime maintenance operations of short duration on a 4-lane divided roadway where half of the roadway is closed.



(B) Typical application - 3-lane oneway roadway where center lane is closed.



(C) Typical application - construction operations of intermediate to long term duration on a 4-lane divided roadway where half of the roadway is closed.

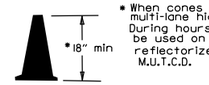
KEY:

- Arrow Panel (If Required)
- ■ Channelizing Device
- ● Traffic drum

GENERAL NOTES:

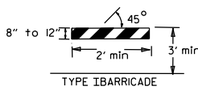
1. A speed limit reduction may be implemented ONLY when designated in the plan or when recommended by the Roadway Design Division.
2. When the existing speed limit is 55mph and the plans require a speed limit of 45mph, the R2-1(55) shall be omitted and the R2-5A shall be installed at that location. Additional R2-1 45mph speed limit signs shall be installed at a maximum of 1mile intervals. At the end of the work area a R2-1(XX) shall be installed to match original speed limit.
3. When the existing speed limit is 65mph and the plans require a speed limit of 55mph, the R2-1(45) shall be omitted. Additional R2-1 55mph speed limit signs shall be installed at a maximum of 1mile intervals. At the end of the work area a R2-1(XX) shall be installed to match original speed limit.
4. The maximum spacing between channelizing devices in a taper should be approximately equal in feet to the speed limit. Beyond the taper, maximum spacing shall be two times the speed limit or as directed by the Engineer.
5. Warning lights and/or flags may be mounted to signs or channelizing devices at night as needed.
6. Pavement markings no longer applicable which might create confusion in the minds of vehicle operators shall be removed or obliterated as soon as practicable.
7. The G20-1 sign will be required on jobs of over two miles in length. When the lane closure is not at the beginning of the project, the G20-1 sign shall be erected 125' in advance of the job limit. Additional W20-1 (1 MILE) signs are not required in advance of lane closures that begin inside the project limits.
8. Flaggers shall use STOP/SLOW paddles for controlling traffic through work zones. Flags may be used only for emergency situations.
9. All plastic drums and cones shall meet the requirements of NCHRP-350 or Manual For Assessing Safety Hardware (MASH).
10. Trailer mounted devices such as arrow panels and portable changeable message signs shall be delineated by affixing conspicuity material in a continuous line on the face of the trailer. When placed on or adjacent to the shoulder and not behind a positive barrier, these devices shall be delineated by placing five (5) traffic drums, equally spaced along the traffic side of the device.

Channelizing devices



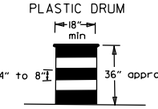
* When cones are used on freeways and multi-lane highways, they shall be 28" min. During hours of darkness, 28" cones shall be used on all roadways, and shall be reflectorized in accordance with the M.U.T.C.D.

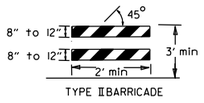
CONES



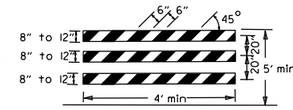
TYPE I BARRICADE

PLASTIC DRUM



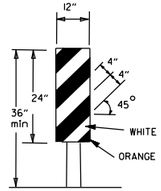


TYPE II BARRICADE



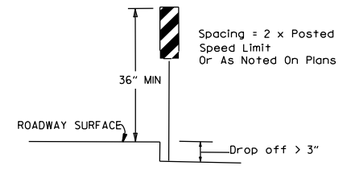
TYPE III BARRICADE

NOTE:
For all road closures, the Type III barricades shall be of sufficient length to extend across entire roadway.



VERTICAL PANEL
VP-1R

VERTICAL PANEL PLACEMENT



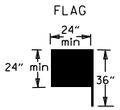
TRAFFIC CONTROL DEVICES
FOR
VERTICAL PAVEMENT DIFFERENTIALS

VERTICAL DIFFERENTIAL	LOCATIONS	TRAFFIC CONTROL
1" to 3"	Centerline, lane lines	W8-11
1" to 3"	Edge of shoulder	W8-9
Greater than 3"	Lane lines	Standard lane closure required
Greater than 3"	Edge of traveled lane	*RSP-1 and vertical panels, drums or concrete barrier
Greater than 3"	Edge of shoulder	*Vertical panels, drums or concrete barrier

• When shown on the plans concrete barrier will be used.

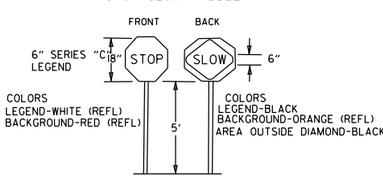
When the shoulder area is used as part of the traveled lane and there is insufficient width to place drums on the remaining shoulder width, then vertical panels shall be used.

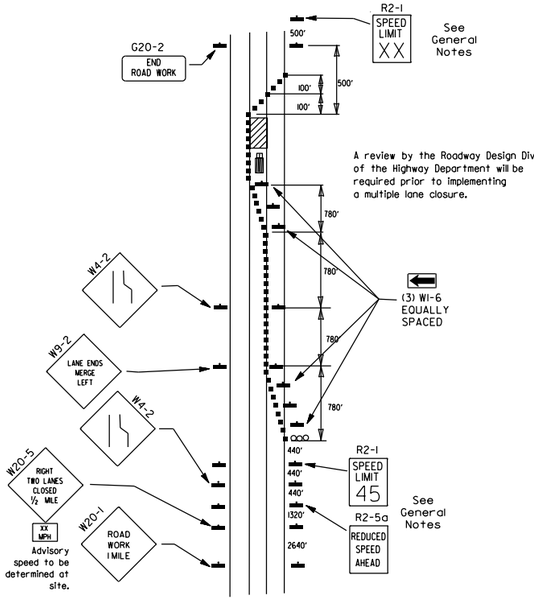
FLAG



Flag shall be of good grade red material

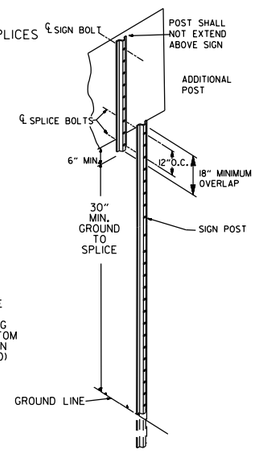
STOP SLOW PADDLE





(D) Typical application - closing multiple lanes of a multilane highway.

DETAIL OF SPLICES



NOTES: USE SPLICES ONLY WHEN NECESSARY FOR INSTALLATION. TYPICAL INSTALLATION SHOULD HAVE NO SPLICES (SEE STD. DRAWING NO. SHS-2)

NORMAL INSTALLATIONS WILL REQUIRE 1/4" DIA. BOLTS TO MOUNT SIGNS TO POST AND 5/16" DIA. BOLTS TO ASSEMBLE THE VARIOUS POST SUPPORTS. EACH OF THESE BOLTS SHALL BE CARRIAGE BOLTS.

SIGN POSTS SHALL BE PAINTED GREEN; SIGNS SHALL NOT BE PAINTED, AND ALL SIGN POSTS SHALL BE PLUMB.

DATE	REVISION	FILMED
10-15-09	ADDED REFERENCE TO MASH	
11-20-08	REVISED SIGN DESIGNATIONS	
11-18-04	ADDED NOTE	
10-1-98	ADDED NOTE	
4-03-97	ADDED (SP) TO W6-1 & REVISED TRAFFIC CONTROL DEVICES NOTE	
10-18-96	ADDED R55-1	
10-12-95	MOVED UPPER SPLICE	
6-8-95	REVISED SPLICE DETAIL, TEXT	6-8-95
2-2-95	REVISED PER PART VI, MUTCD, SEPT. 3, 1993	
8-15-91	DRAWN AND PLACED IN USE	

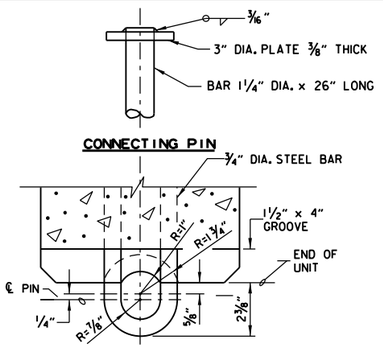
ARKANSAS STATE HIGHWAY COMMISSION

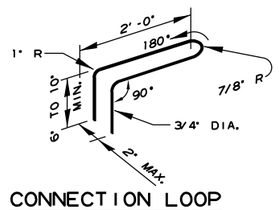
STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION

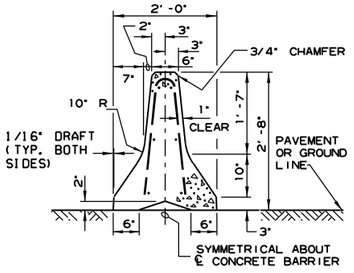
STANDARD DRAWING TC-3

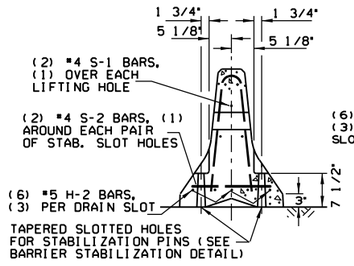
REINFORCING BAR TABLE PER BARRIER UNIT

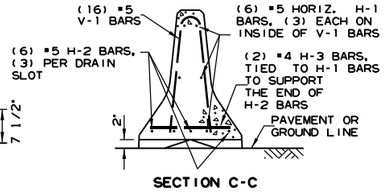
MARK	LOCATION	BAR SIZE	(NO. BARS)	SKETCH
H-1	HORIZONTAL IN BARRIER TIED INSIDE V-1 BARS	#5	(6)	19'-3"
H-2	CENTERED ABOVE DRAIN SLOTS LONG. & TRANSVERSELY	#5	(6)	6'-6"
H-3	TIED ABOVE H-1 BARS TO SUPPORT H-2, TIED TO V-1	#4	(2)	1'-6"
S-1	OVER LIFT HOLES	#4	(2)	2'-5", LIFTING HOLE, 90°, 3 3/8" R
S-2	HORIZ. AROUND SLOTS BETWEEN V-1'S @ DRAIN SLOTS	#4	(2)	1 1/2" R, SLOTS, 7", 1'-6", 1" MIN. CLEAR TO BAR; 5'-1" BAR W/(4) 1 1/2" R BENDS & MIN. 1'-0" OVERLAP
V-1	VERTICAL IN BARRIER(3) EACH END & (2) AT EACH DRAIN SLOTS	#5	(16)	TOTAL LENGTH 4'-9"; 2 3/16" R; 12°; 1 1/2"; 9"; 2'-1 3/8"; 4 3/8"

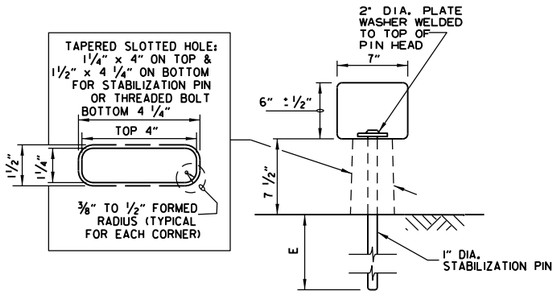




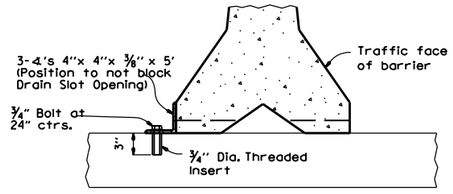






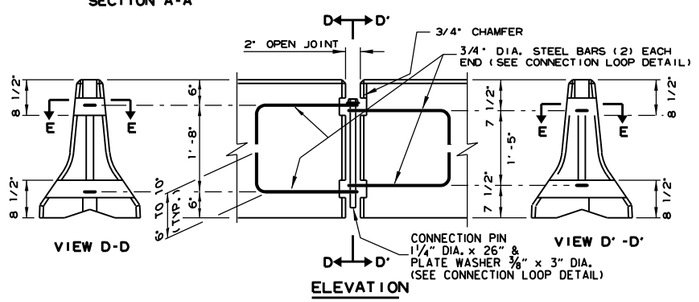


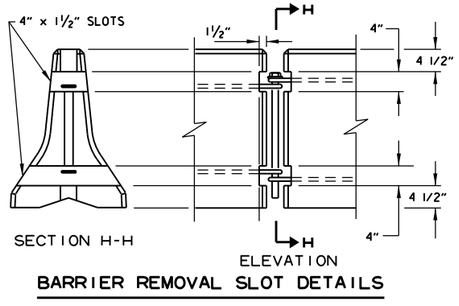
Ⓔ 4" - Concrete Pavement
8" - Asphalt Pavement
12" - Shoulder Areas

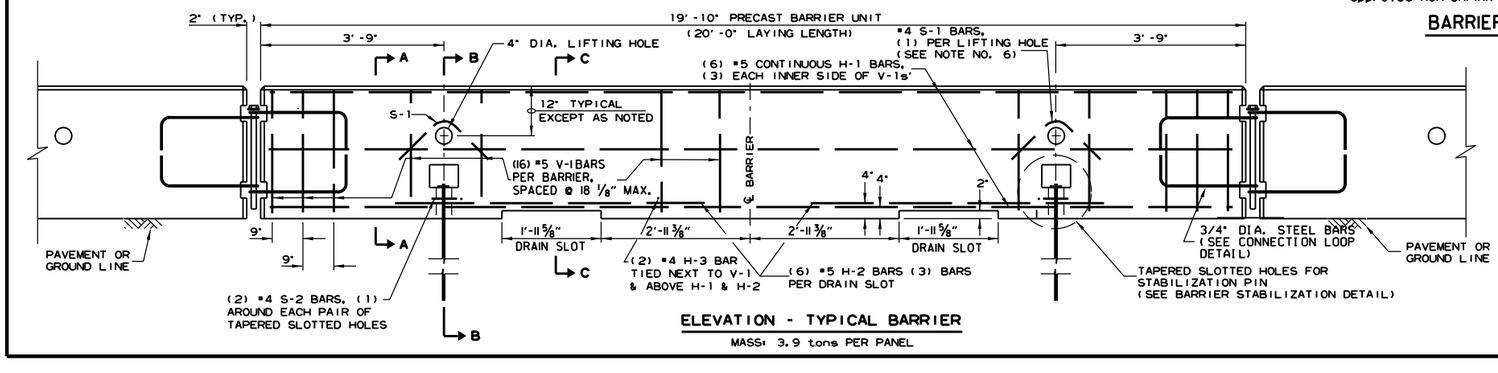


NOTE: 3/4" Threaded inserts shall be cast in place for all new bridge decks and drilled and grouted for existing bridge decks. Inserts shall have a minimum ultimate load capacity of 8000 lbs. in tension. After removal of barrier, bolts, and angles, the inserts shall be filled with approved non-shrink epoxy.

BARRIER STABILIZATION DETAIL
BRIDGE DECKS







MASS: 3.9 tons PER PANEL

General Notes

1. The contractor shall furnish the Precast Concrete Barrier Units and shall be responsible for the manufacture, shipment, storage, placement and removal. At the completion of the project, the precast units will remain the property of the contractor.

2. Materials shall meet the following minimum requirements:
   Concrete: 2500 psi compressive strength at 28 days.
   Reinforcing Steel: AASHTO M 31 or M 53, Grade 60
   Structural Steel: AASHTO-M270 Grade 36 shall be used for the Connection Pin, Connection Loops, and Stabilization Pins. A One Piece Pin with a 3" rounded top may be used in place of the detailed Connection Pin.
   Delineators: Delineators shall be mounted at 10' spacing on top of precast barrier.

   In applications where barrier wall is within 6 feet of a traffic lane, additional delineators shall be placed on the barrier at 10' spacing approximately one (1) foot from the top of the barrier. Delineators shall be on the AHTD Qualified Products List for Construction Concrete Barrier Markers.
   Delineator color shall be in accordance with the Manual on Uniform Traffic Control Devices.
   Payment for delineators shall be considered included in the price bid per Lin. Ft. for "Furnishing and Installing Precast Concrete Barrier". The contractor shall certify to the Engineer that the material and the design used in the precast barrier units meets the requirements as shown on this standard drawing.

3. Other Precast Concrete Barriers that have been crash tested and approved by the Federal Highway Administration to meet the requirements of NCHRP-350 test level 3 or Manual For Assessing Safety Hardware (MASH) will be accepted in lieu of the barrier shown. Drain slots shall be provided as needed or as directed by the Engineer. The Contractor shall furnish a certification of NCHRP Report 350 or Manual For Assessing Safety Hardware (MASH) compliance for any other types of precast barrier to be used. The certification shall state that the precast concrete barrier meets the requirements of NCHRP Report 350 or Manual For Assessing Safety Hardware (MASH) and include a copy of the Federal Highway Administration's (FHWA) approval letter with all attachments. Precast concrete barrier units shall be fabricated and installed in accordance with crash testing and documentation provided in the FHWA approval letter. Mixing of shapes will not be allowed in a continuous line of units.

4. Dowel holes in pavement or bridge slabs that are to remain in place shall be filled. Holes in concrete pavement and bridge slabs shall be filled with an approved non-shrink epoxy grout. Holes in asphalt pavement shall be filled with an approved asphalt joint filler. Payment for drilling and filling holes to be included in the price for various barrier items.

5. Attach Units To Roadway Surface with Stabilization Pins and to Deck Slabs using bolts when required.

6. A 4" White PVC Sleeve may be used to form the Lifting Hole and if used the Sleeve is to be left in place.

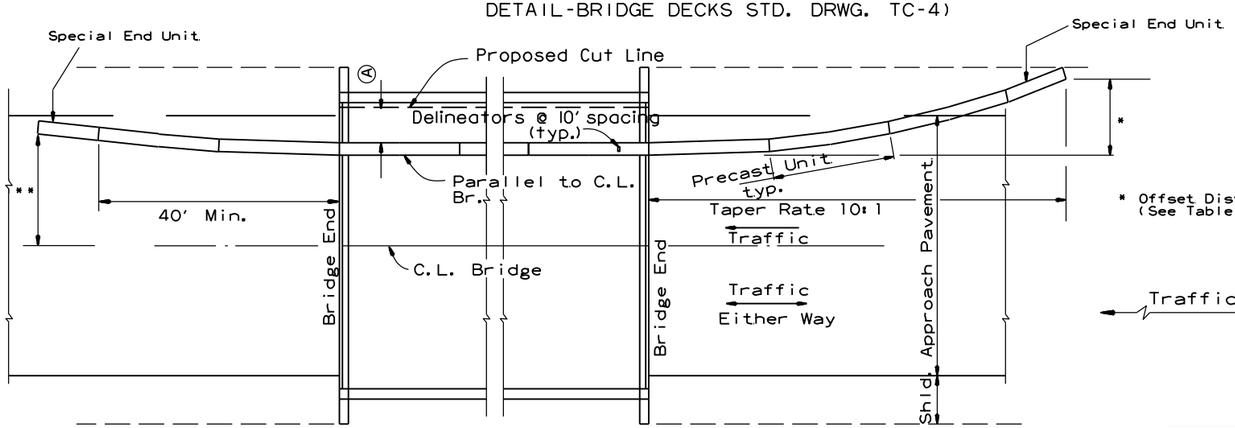
DATE	REVISION	FILMED
2-27-14	REVISED BARRIER STABILIZATION DETAIL	
10-15-09	ADDED REFERENCE TO WASH	
8-5-09	REV. NOTE 3 CONCERNING DRAIN SLOTS	
11-29-07	REVISED NOTE 3	
5-25-06	DELETED GENERAL NOTE 7	
11-18-04	REVISED BARRIER STABILIZATION DETAIL BRIDGE DECKS	
4-10-03	REVISED GENERAL NOTE 2	
8-22-02	ISSUED NEW DRAWING	

ARKANSAS STATE HIGHWAY COMMISSION

STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION - TEMPORARY PRECAST BARRIER

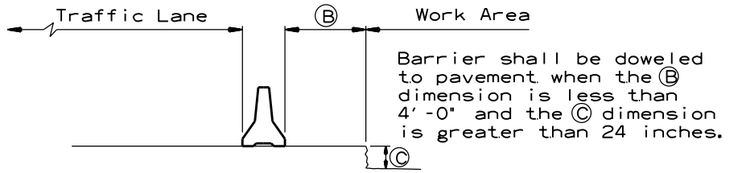
STANDARD DRAWING TC-4

Ⓐ 4 feet or greater preferred. If less than 4 feet, Precast Units shall be connected to slab (SEE BARRIER STABILIZATION DETAIL-BRIDGE DECKS STD. DRWG. TC-4)



BARRIER PLACEMENT ALONG BRIDGE WITH OFFSET

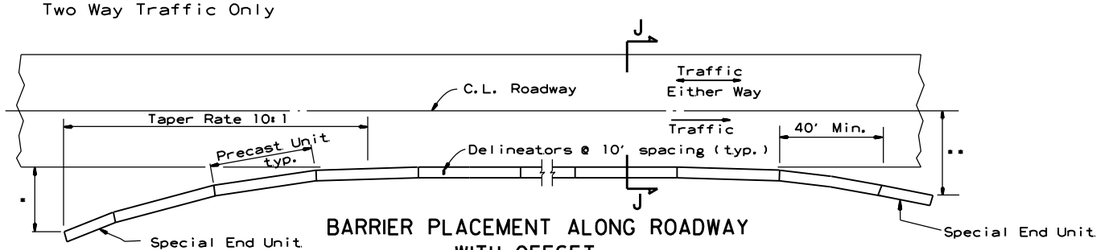
No Scale



SECTION J-J

No Scale

** Offset Distance for Two Way Traffic Only



BARRIER PLACEMENT ALONG ROADWAY WITH OFFSET

No Scale

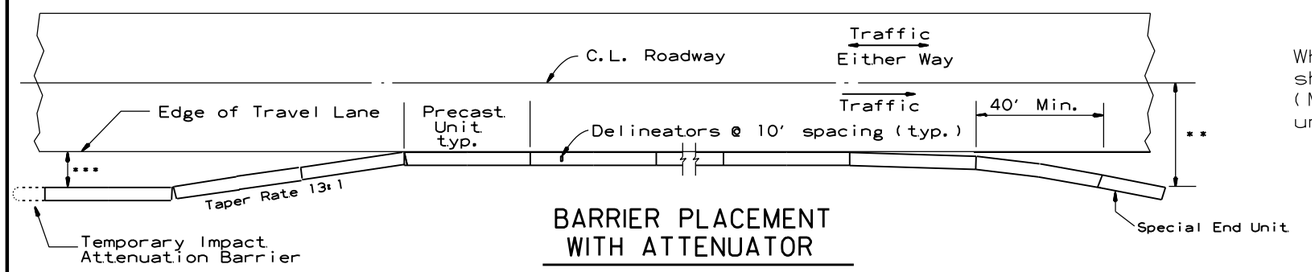
* Offset Distance (See Table)

** Offset Distance For Two Way Traffic Only

Offset Distance Table

Speed (MPH)	Offset Distance (FT.)
≤ 45	12
> 45	18

If offset distance is not attainable, then see "Barrier Placement With Attenuator" Detail shown below.

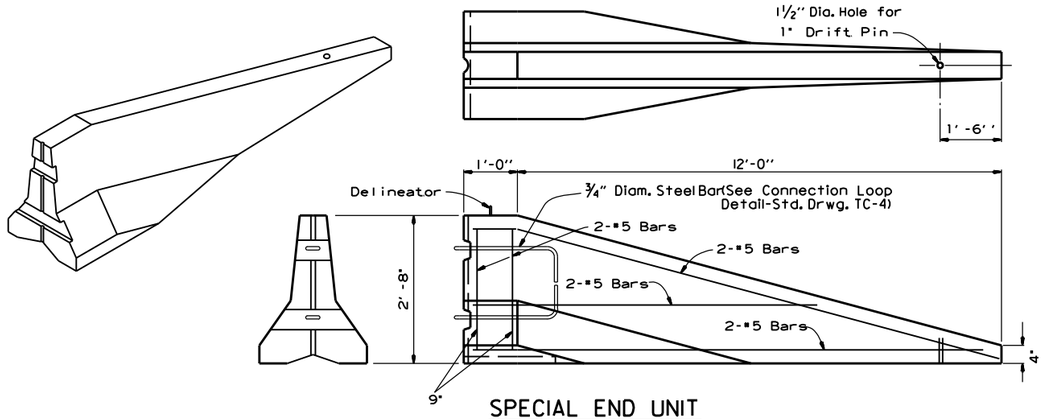


BARRIER PLACEMENT WITH ATTENUATOR

No Scale

*** Min. 3'-0" From Edge of Travel Lane to Nearest Edge of Attenuator

** Offset Distance For Two Way Traffic Only



SPECIAL END UNIT

No Scale

General Notes

When shown on the Plans, the ends of the Temporary Precast Concrete Barrier shall be protected with an NCHRP-350 or Manual For Assessing Safety Hardware (MASH) approved Crash Cushion. Payment for Crash Cushions shall be made under the item of "Temporary Impact Attenuation Barrier."

DATE	REVISION	FILMED
10-15-09	ADDED REFERENCE TO MASH	
5-25-06	REVISED BARRIER PLACEMENT	
8-22-02	ISSUED NEW DRAWING	

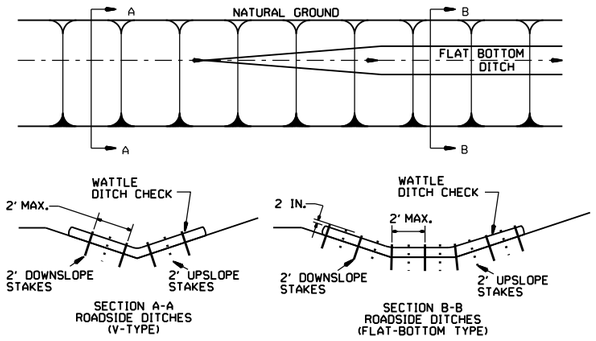
ARKANSAS STATE HIGHWAY COMMISSION

STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION - TEMPORARY PRECAST BARRIER

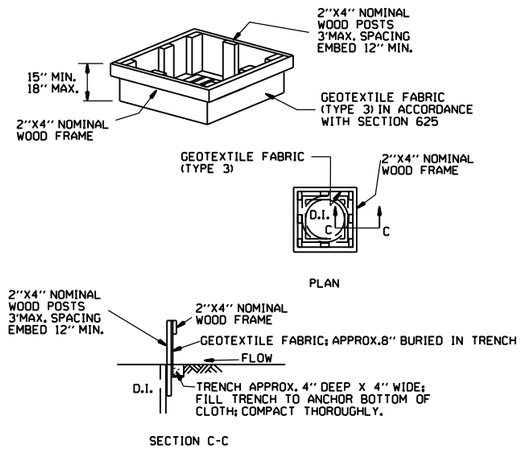
STANDARD DRAWING TC-5

GENERAL NOTES

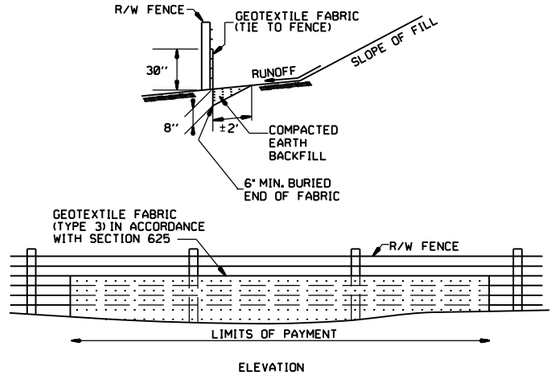
INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.



WATTLE DITCH CHECK (E-1)



DROP INLET SILT FENCE (E-7)



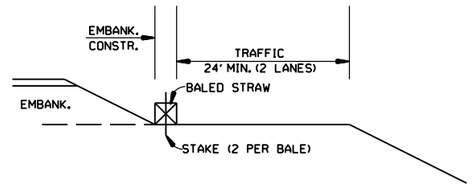
SILT FENCE ON R/W FENCE (E-4)

GENERAL NOTES

GEOTEXTILE FABRIC SHALL BE SPLICED TOGETHER WITH A SEWN SEAM ONLY AT A SUPPORT POST, OR TWO SECTIONS OF FENCE MAY BE OVERLAPPED INSTEAD. PAYMENT OF ADDITIONAL MATERIAL FOR OVERLAP WILL NOT BE MADE.

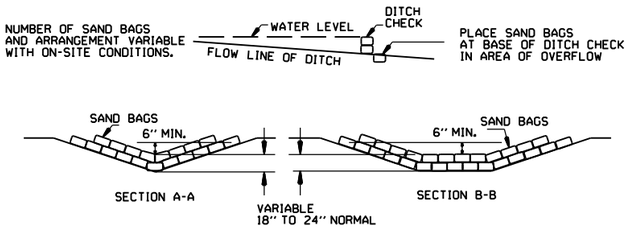
GENERAL NOTES

1. STRAW BALES SHALL BE INSTALLED SO THAT THE BINDINGS ARE ORIENTED AROUND THE SIDES RATHER THAN ALONG THE TOPS AND BOTTOMS OF THE BALES. THE BALES SHALL BE A MINIMUM OF 30 INCHES IN LENGTH.
2. NO GAPS SHALL BE LEFT BETWEEN BALES.
3. BALED STRAW FILTER BARRIERS COMPLETED AND ACCEPTED WILL BE MEASURED BY THE BALE IN PLACE AS AUTHORIZED BY THE ENGINEER AND WILL BE PAID FOR AT THE CONTRACT UNIT PRICE BID PER BALE FOR BALED STRAW DITCH CHECKS.

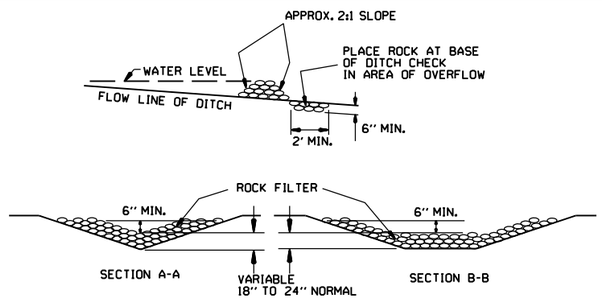


BALED STRAW FILTER BARRIER (E-2)

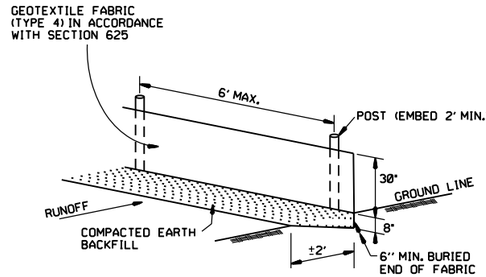
NUMBER OF SAND BAGS AND ARRANGEMENT VARIABLE WITH ON-SITE CONDITIONS.



SAND BAG DITCH CHECK (E-5)



ROCK DITCH CHECK (E-6)



SILT FENCE (E-11)

GENERAL NOTES

GEOTEXTILE FABRIC SHALL BE SPLICED TOGETHER WITH A SEWN SEAM ONLY AT A SUPPORT POST OR TWO SECTIONS OF FENCE MAY BE OVERLAPPED INSTEAD. PAYMENT OF ADDITIONAL MATERIAL FOR OVERLAP WILL NOT BE MADE.

DATE	REVISION	FILMED
12-15-11	DELETED BALED STRAW DITCH CHECK & ADDED WATTLE DITCH CHECK	
11-18-98	ADDED NOTES	
7-02-98	ADDED BALED STRAW FILTER BARRIER (E-2)	
7-20-95	REVISED SILT FENCE E-4 AND E-11	7-20-95
7-15-94	REV. E-4 & E-11 MIN. 13" BURIED END OF FABRIC	
6-2-94	REVISED E-1,4,7 & 11; DELETED E-2 & 3	6-2-94
4-1-93	REDRAWN	
10-1-92	REDRAWN	
8-2-76	ISSUED R.D.M.	298-7-28-76

ARKANSAS STATE HIGHWAY COMMISSION

TEMPORARY EROSION CONTROL DEVICES

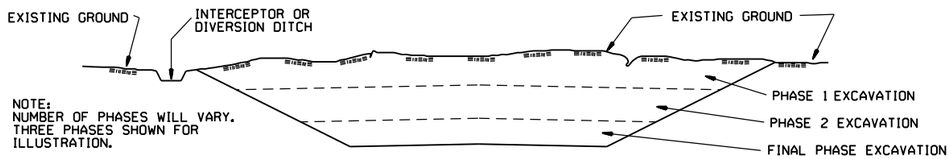
STANDARD DRAWING TEC-1

CLEARING AND GRUBBING

CONSTRUCTION SEQUENCE

1. PLACE PERIMETER CONTROLS (I.E. SILT FENCES , DIVERSION DITCHES, SEDIMENT BASINS, ETC.)
2. PERFORM CLEARING AND GRUBBING OPERATION.

EXCAVATION



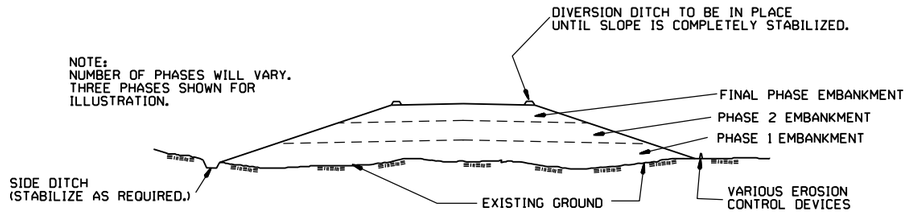
GENERAL NOTE

ALL CUT SLOPES SHALL BE DRESSED, PREPARED, SEEDED, AND MULCHED AS THE WORK PROGRESSES. SLOPES SHALL BE EXCAVATED AND STABILIZED IN EQUAL INCREMENTS NOT TO EXCEED 25 FEET, MEASURED VERTICALLY.

CONSTRUCTION SEQUENCE

1. EXCAVATE AND STABILIZE INTERCEPTOR AND/OR DIVERSION DITCHES.
2. PERFORM PHASE 1 EXCAVATION. PLACE PERMANENT OR TEMPORARY SEEDING.
3. PERFORM PHASE 2 EXCAVATION. PLACE PERMANENT OR TEMPORARY SEEDING.
4. PERFORM FINAL PHASE OF EXCAVATION. PLACE PERMANENT OR TEMPORARY SEEDING. STABILIZE DITCHES. CONSTRUCT DITCH CHECKS, DIVERSION DITCHES, SEDIMENT BASINS, OR OTHER EROSION CONTROL DEVICES AS REQUIRED.

EMBANKMENT



GENERAL NOTE

ALL EMBANKMENT SLOPES SHALL BE DRESSED, PREPARED, SEEDED, AND MULCHED AS THE WORK PROGRESSES. SLOPES SHALL BE CONSTRUCTED AND STABILIZED IN EQUAL INCREMENTS NOT TO EXCEED 25 FEET, MEASURED VERTICALLY.

CONSTRUCTION SEQUENCE

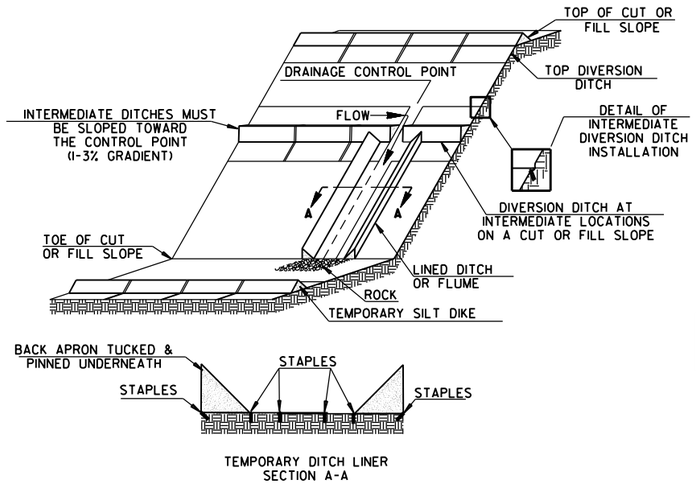
1. CONSTRUCT DIVERSION DITCHES, DITCH CHECKS, SEDIMENT BASINS, SILT FENCES, OR OTHER EROSION CONTROL DEVICES AS SPECIFIED.
2. PLACE PHASE 1 EMBANKMENT WITH PERMANENT OR TEMPORARY SEEDING. PROVIDE DIVERSION DITCHES AND SLOPE DRAINS IF EMBANKMENT CONSTRUCTION IS TO BE TEMPORARILY ABANDONED FOR A PERIOD OF GREATER THAN 21 DAYS.
3. PLACE PHASE 2 EMBANKMENT WITH PERMANENT OR TEMPORARY SEEDING. PROVIDE DIVERSION DITCHES AND SLOPE DRAINS IF EMBANKMENT CONSTRUCTION IS TO BE TEMPORARILY ABANDONED FOR A PERIOD OF GREATER THAN 21 DAYS.
4. PLACE FINAL PHASE OF EMBANKMENT WITH PERMANENT OR TEMPORARY SEEDING. PLACE DIVERSION DITCHES AND SLOPE DRAINS AND MAINTAIN UNTIL ENTIRE SLOPE IS STABILIZED.

DATE	REVISION	FILMED
11-03-94	CORRECTED SPELLING	
6-2-94	Drawn & Issued	6-2-94

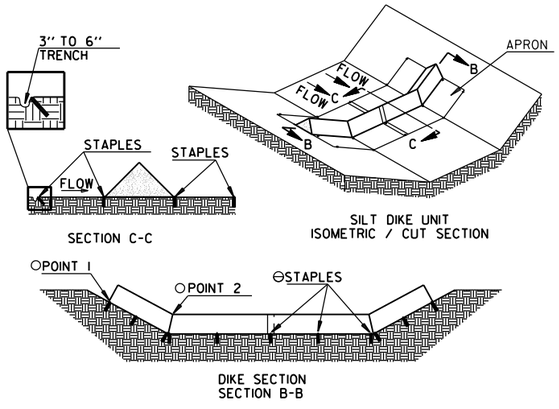
ARKANSAS STATE HIGHWAY COMMISSION

TEMPORARY EROSION CONTROL DEVICES

STANDARD DRAWING TEC-3



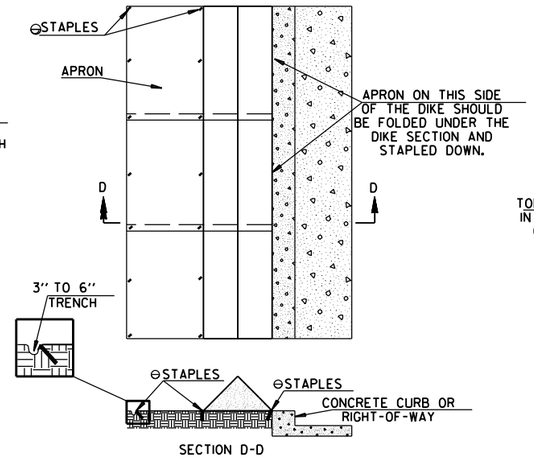
TRIANGULAR SILT DIKE INSTALLATION FOR DIVERSION DITCH AND/OR DITCH LINER



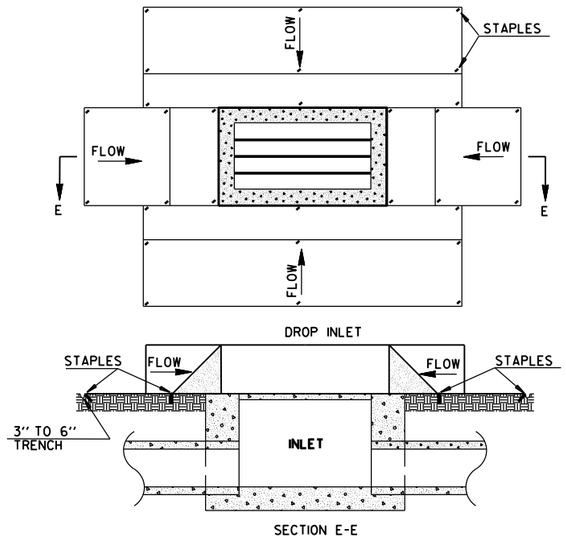
TRIANGULAR SILT DIKE INSTALLATION FOR ROADWAY DITCH OR DRAINAGE DITCH

○ POINT "1" MUST BE HIGHER THAN POINT "2" TO ENSURE THAT WATER FLOWS OVER THE DIKE AND NOT AROUND THE ENDS.

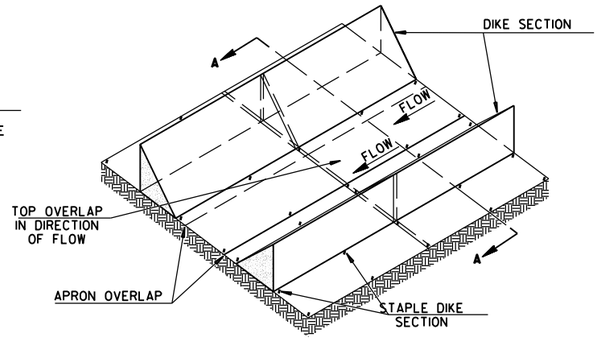
⊖ STAPLES SHALL BE PLACED WHERE THE UNITS OVERLAP AND IN THE CENTER OF THE UNIT AS SHOWN ON THE DIAGRAM.



TRIANGULAR SILT DIKE INSTALLATION FOR CONTINUOUS BARRIER



TRIANGULAR SILT DIKE INSTALLATION FOR DROP INLETS



TRIANGULAR SILT DIKE INSTALLATION FOR TEMPORARY DITCH LINER

GENERAL NOTES

1. THIS WORK SHALL CONSIST OF FURNISHING, INSTALLING, AND MAINTAINING THE TRIANGULAR SILT DIKE. THE DIKES SHALL BE USED AS A CONTINUOUS LINE BARRIER AT THE TOE OF SLOPE OR ACROSS THE ROADWAY DITCH TO CONTAIN SEDIMENT AND MINIMIZE EROSION, OR AS DIRECTED BY THE ENGINEER. THESE DIKES SHALL BE INSTALLED AND LOCATED AS SOON AS CONSTRUCTION WILL ALLOW OR AS DIRECTED BY THE ENGINEER.

2. TRIANGULAR SILT DIKE SHALL BE TRIANGULAR SHAPED HAVING A HEIGHT OF AT LEAST 8" TO 10" IN THE CENTER WITH EQUAL SIDES AND A 16" TO 20" BASE. THE TRIANGULAR SHAPED INNER MATERIAL SHALL BE URETHANE FOAM. THE OUTER COVER SHALL BE A WOVEN GEOTEXTILE FABRIC PLACED AROUND THE INNER MATERIAL & ALLOWED TO EXTEND BEYOND BOTH SIDES OF THE TRIANGLE 24" TO 36". THIS FABRIC SHOULD BE MILDEW RESISTANT, ROT-PROOF AND RESISTANT TO HEAT AND ULTRAVIOLET RADIATION MEETING REQUIREMENTS FOR SEDIMENT CONTROL IN AASHTO M288. THE DIKES SHALL BE ATTACHED TO THE GROUND WITH WIRE STAPLES. THE STAPLES SHALL BE NO. 11 GAUGE WIRE AND BE AT LEAST 6" TO 8" LONG. STAPLES SHALL BE PLACED AS SHOWN ON THESE DETAILS.

   THE CONTRACTOR SHALL INSPECT ALL DIKES AFTER EACH RAINFALL EVENT OF AT LEAST 0.5" OR GREATER. ANY DEFICIENCIES OR DAMAGE SHALL BE REPAIRED BY THE CONTRACTOR. ACCUMULATED SILT OR DEBRIS SHALL BE REMOVED AND RELOCATED AS DIRECTED BY THE ENGINEER. IF THE DIKES ARE DAMAGED OR INADVERTENTLY MOVED DURING THE SILT REMOVAL PROCESS, THE CONTRACTOR SHALL IMMEDIATELY REPLACE AFTER DAMAGE OCCURS.

3. ACCEPTED TRIANGULAR SILT DIKE, MEASURED AS PROVIDED ABOVE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE BID FOR TRIANGULAR SILT DIKE. PRICE BID WILL INCLUDE THE COST OF FURNISHING THE DIKES, INSTALLING, MAINTAINING AND REMOVAL WHEN DIRECTED BY THE ENGINEER.

SYMBOLOGY
SYMBOL TO BE USED TO DENOTE DEVICE ON PLANS

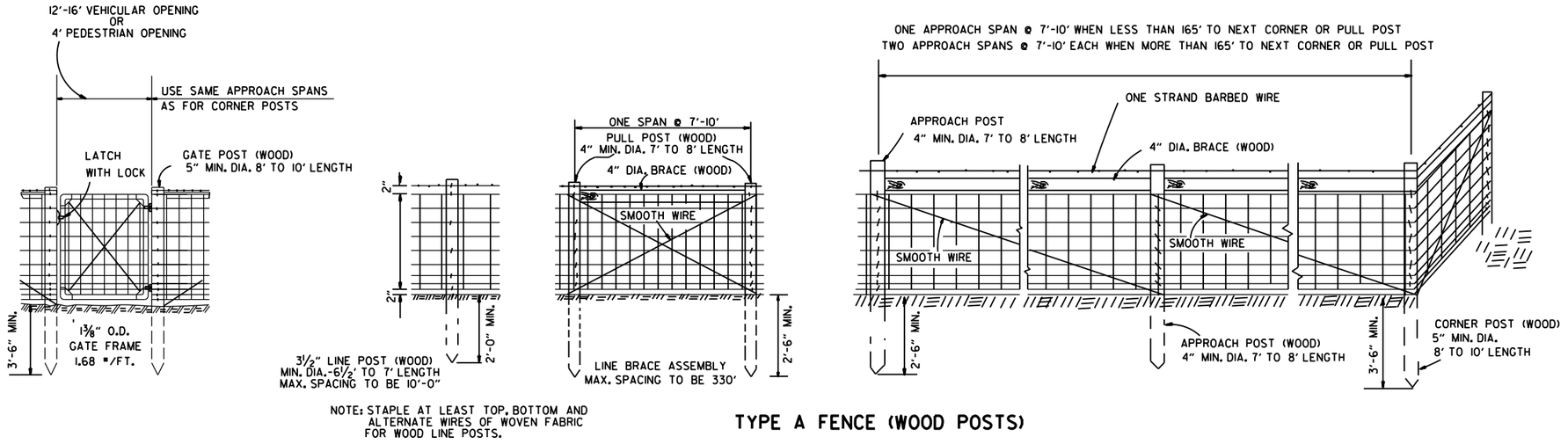
NOTE: SILT DIKE SHOULD ONLY BE USED FOR DROP INLETS IN SUMP LOCATIONS.

DATE	REVISION	FILMED
7-26-12	REVISED GENERAL NOTE 2.	
12-15-11	ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION

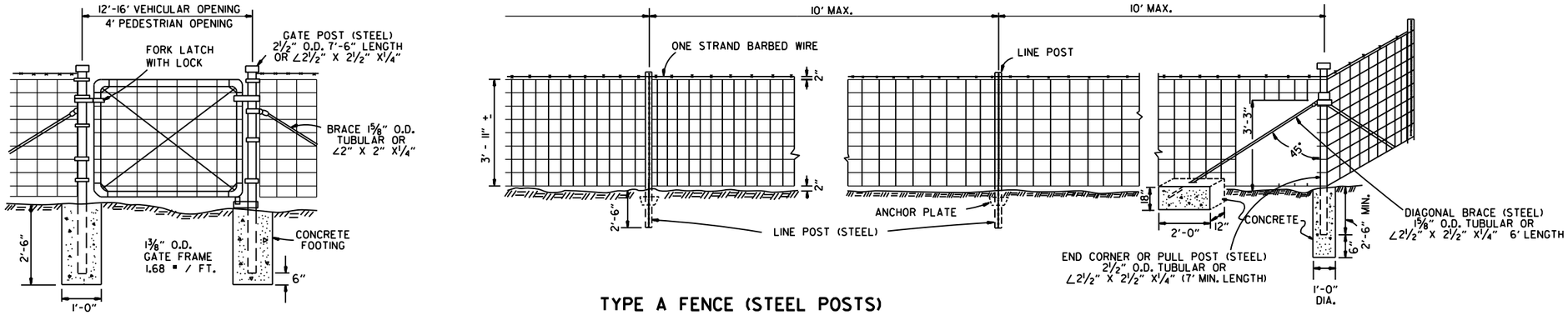
TEMPORARY EROSION CONTROL DEVICES

STANDARD DRAWING TEC-4

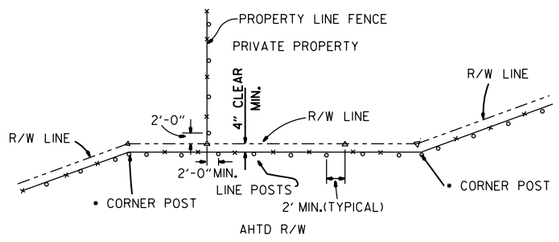


NOTE: STAPLE AT LEAST TOP, BOTTOM AND ALTERNATE WIRES OF WOVEN FABRIC FOR WOOD LINE POSTS.

TYPE A FENCE (WOOD POSTS)



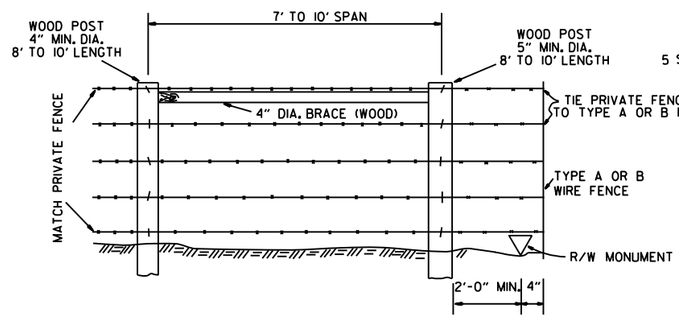
TYPE A FENCE (STEEL POSTS)



•NOTE: RIGHT-OF-WAY MONUMENTS SHALL NOT BE DISTURBED BY FENCE CONSTRUCTION. CORNER POSTS SHALL BE CONSTRUCTED 2' FROM THE RIGHT-OF-WAY MONUMENT OR AS DIRECTED BY THE ENGINEER.

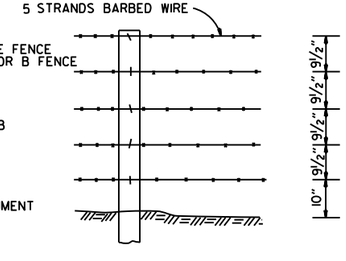
△ - R/W MONUMENTS
○ - FENCE POSTS

RIGHT-OF-WAY FENCE LOCATION



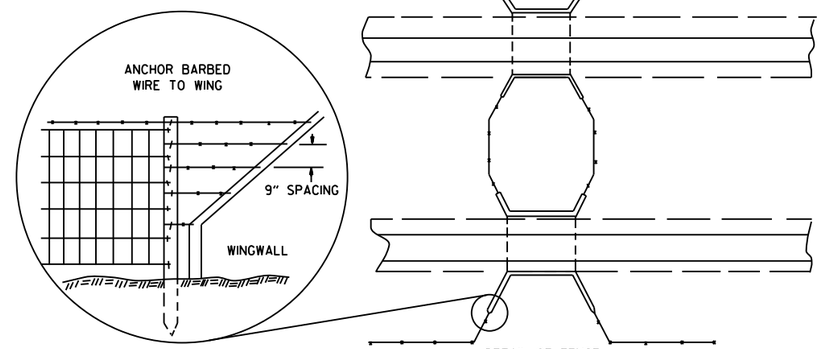
WHERE EXISTING PRIVATE FENCE CONSISTS OF STEEL POSTS, USE END POST ASSEMBLY AS SHOWN WITH TYPE A FENCE OR OTHER END POST ASSEMBLY AS APPROVED BY THE ENGINEER.

PRIVATE FENCE TERMINAL INSTALLATION



SPACING AND SIZE OF POSTS FOR TYPE B FENCE SHALL BE THE SAME AS TYPE A FENCE.

TYPE B FENCE



DETAIL OF FENCE CONSTRUCTION AT LARGE CULVERTS (5' IN HEIGHT AND OVER)

GENERAL NOTES:

STEEL LINE POSTS SHALL BE GALVANIZED, 7 FT. IN LENGTH.

TUBULAR END, CORNER, PULL, OR DIAGONAL BRACES MUST CONFORM TO THE DIMENSIONS AND WEIGHTS SPECIFIED ON STANDARD DRAWING WF-3 (CHAIN LINK).

THE CONTRACTOR SHALL FURNISH AT LEAST 25% OF WOOD LINE POSTS OF 7' LENGTHS IN ORDER TO PROVIDE SUFFICIENT SET IN SOFT GROUND OR SMALL DEPRESSIONS.

GATE HINGES AND LATCHES WITH LOCKS TO BE OF A TYPE APPROVED BY THE ENGINEER. DRIVEWAY GATES, EITHER SINGLE 12' OR 16' OR DOUBLE 6' TO 8' OPENINGS OF THE SAME TYPE AS THE PEDESTRIAN GATE, SHALL BE INSTALLED ON THE RIGHT SIDE OF EACH THROUGH LANE ROAD AT LARGE CULVERTS OR BRIDGE CROSS FENCE FOR USE BY MAINTENANCE EQUIPMENT. LOCATION OF GATES TO BE SHOWN ON THE PLANS OR AS DESIGNATED BY THE ENGINEER.

AT STREAM CROSSINGS THE FENCE SHALL NOT BE CONSTRUCTED ACROSS LARGE STREAMS. WHERE CLEARANCE IS SUFFICIENT FROM THE TOP OF BANK TO THE BRIDGE STRUCTURE, A CROSS CONNECTION SHALL BE CONSTRUCTED BETWEEN THE FENCE ON EACH SIDE OF THE ROAD. WHERE THE CLEARANCE IS NOT SUFFIEICNT, THE FENCE SHALL BE TERMINATED WITH CROSS CONNECTIONS AND END POSTS ADJACENT TO THE BRIDGE ABUTMENTS OR CULVERT WINGWALLS.

SPLICE FOR WOVEN WIRE BETWEEN PULL POST SHALL BE BY THE "WESTERN UNION METHOD" AS DESCRIBED AS FOLLOWS: THE VERTICAL WIRES FOR EACH END OF THE FENCE FABRIC SHALL BE PLACED SIDE BY SIDE AND THE PROJECTING HORIZONTAL WIRES SHALL BE WRAPPED A MINIMUM OF 4 TIMES AROUND THE HORIZONTAL WIRES OF THE FIRST WEB.

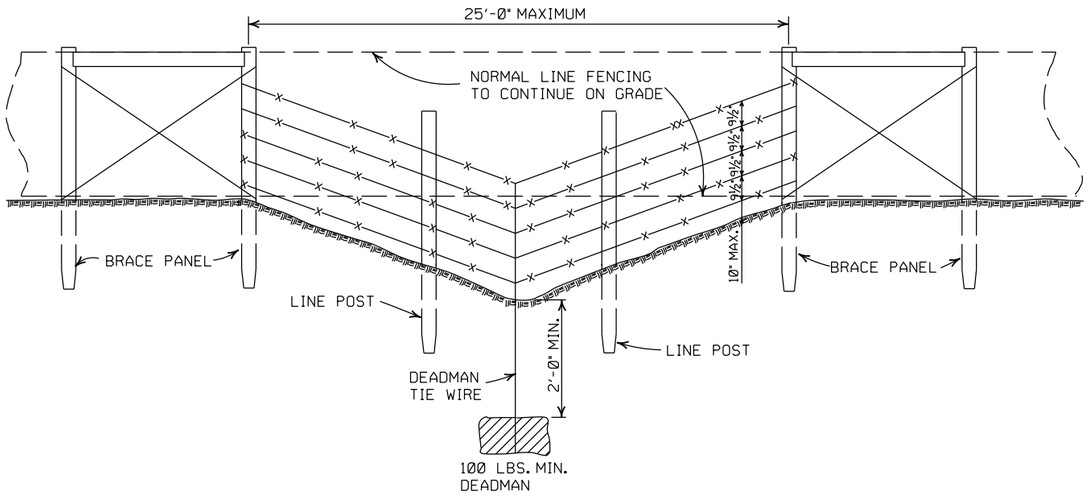
SPLICE FOR BARBED WIRE BETWEEN PULL POST ASSEMBLY SHALL BE BY THE "EYE METHOD": AS DESCRIBED AS FOLLOWS: THE ENDS OF THE BARBED WIRE SHALL BE BENT TO FORM A LOOP. THE LOOPS SHALL BE CONNECTED. AFTER THE LOOPS ARE CONNECTED THE ENDS OF THE WIRE SHALL BE WRAPPED AROUND THE PROJECTING WIRE A MINIMUM OF 4 TIMES FOR EACH WIRE LOOP.

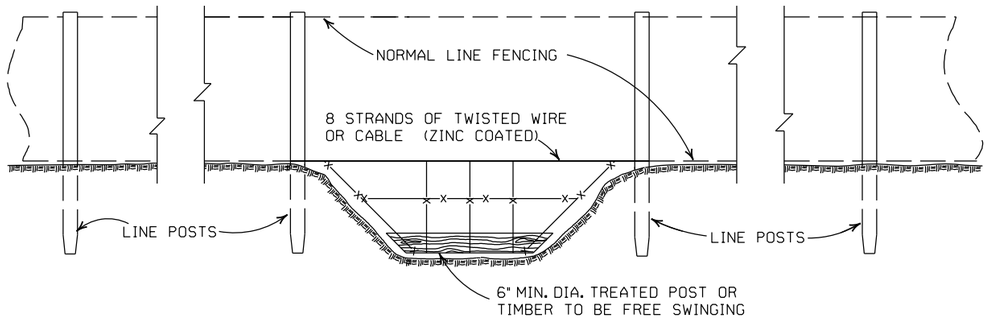
DATE	REVISION	DATE FILMED
8-22-02	REVISED GENERAL NOTES	
10-18-96	REVISED ASTM REF. TO AASHTO	
11-22-95	REVISED R-O-W LOCATION DETAIL	
6-2-94	ADDED CORNER POST NOTE	6-2-94
8-5-93	REVISED R-O-W LOCATION DETAIL	8-5-93
10-1-92	ADDED STAPLE NOTE	
8-2-90	REV'D PULL POST LENGTH	
11-30-89	DELETED CLASS CONC.	
7-15-88	ADDED SPLICE NOTES	
7-15-88	ADDED HEIGHT DIMENSION	
4-3-87	REVISED VARIOUS NOTES	
	AND GENERAL NOTES	
11-1-84	MAX. POST SPACING	
1-4-83	MIN. DIA. LINE POST	
10-2-72	REVISED & REDRAWN	

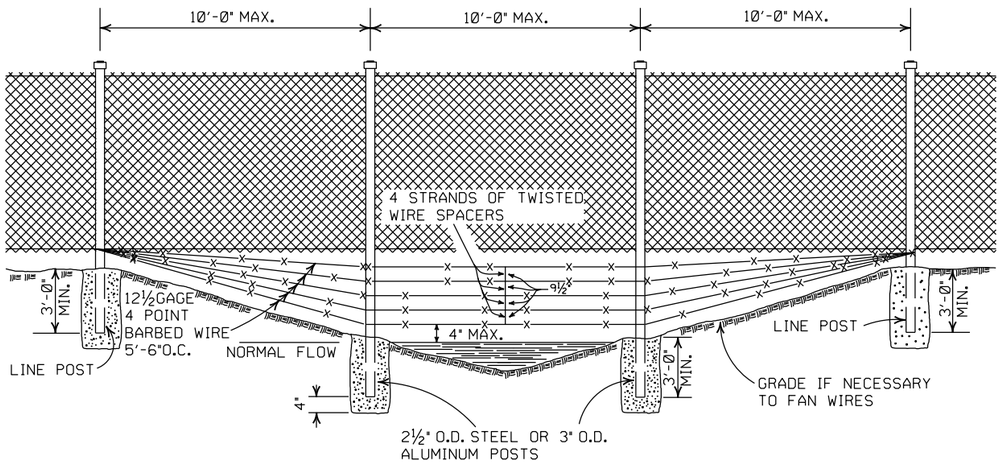
ARKANSAS STATE HIGHWAY COMMISSION

WIRE FENCE
TYPE A AND B

STANDARD DRAWING WF-1







GENERAL NOTES:

THESE INSTALLATIONS TO BE USED WHERE NORMAL FENCING INSTALLATION WOULD CAUSE THE COLLECTING OF DRIFT IN THE CHANNEL OR THE DEPRESSION WILL NOT PERMIT NORMAL INSTALLATION. INSTALLATIONS WILL BE MADE ONLY WHERE DIRECTED BY THE ENGINEER.

WHEN A FENCE LINE APPROACHES A DITCH, GULLY OR DEPRESSION, THE LAST POST ON LEVEL GROUND SHALL BE PLACED CLOSE ENOUGH TO THE EDGE OF THE DROP OFF THAT THE FENCE MAY BE STRUNG TO THE POST IN THE DEPRESSION WITHOUT TOUCHING THE GROUND.

IN TERRAIN OF SUCH EXTREME IRREGULARITY THAT MINOR GRADING WILL NOT BE FEASIBLE, THE NORMAL FENCE SHALL CONTINUE ON GRADE AND THE GULLIES OR DEPRESSIONS TREATED BY AUXILIARY FENCES AS SHOWN.

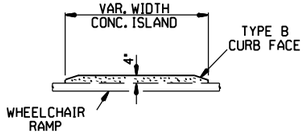
PAYMENT FOR THE TYPE INSTALLATION USED WILL NOT BE MADE DIRECTLY BUT WILL BE INCLUDED IN THE CONTRACT UNIT PRICE BID FOR WIRE FENCE OR CHAIN LINK FENCE.

DATE	REVISION	FILMED
4-20-79	REVISED TOP RAIL & TENSION WIRE	696-4-20-79
10-2-72	REVISED AND REDRAWN	529-10-2-72

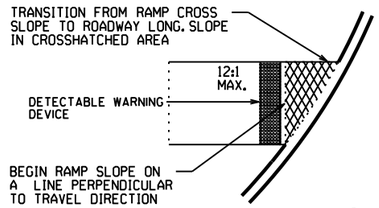
ARKANSAS STATE HIGHWAY COMMISSION

WIRE FENCE WATER GAPS

STANDARD DRAWING WF-2



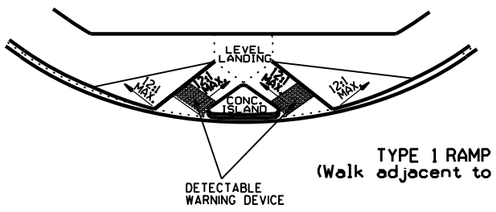
CONCRETE ISLAND DETAIL



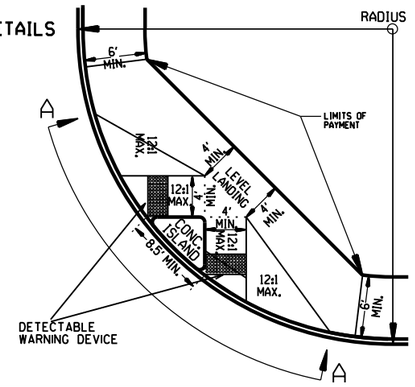
SLOPE TRANSITION DETAILS

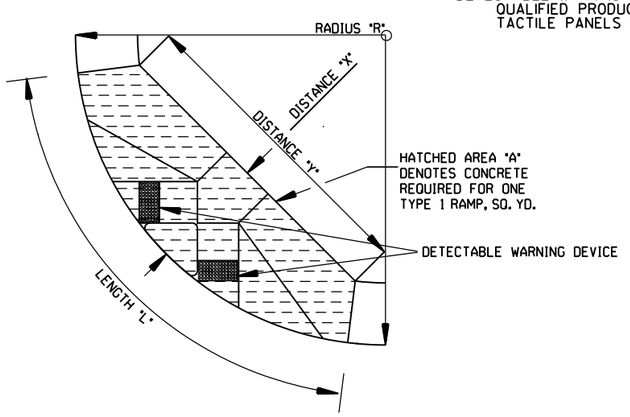
TYPE 1 RAMP DIMENSIONS AND QUANTITIES

RADIUS "R" FEET	DISTANCE "X" FEET	DISTANCE "Y" FEET	LENGTH "L" FEET	RAMP AREA "A" SQ. YD.
15	11.67	18.82	32.18	26.21
20	11.52	22.28	35.46	30.07
25	11.43	26.60	38.77	33.80
30	11.37	30.26	40.93	36.90
35	11.33	33.51	43.11	39.77
40	11.30	36.45	45.26	42.45
45	11.27	39.16	47.34	44.97
50	11.25	41.69	49.36	47.35
55	11.24	44.07	51.31	49.63
60	11.22	46.33	53.21	51.80



TYPE 1 RAMP
(Walk adjacent to curb)

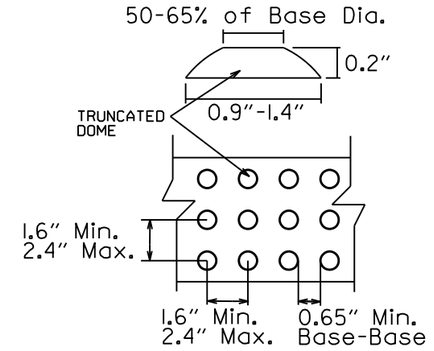




SECTION A-A

GENERAL NOTES FOR DETECTABLE WARNING DEVICES

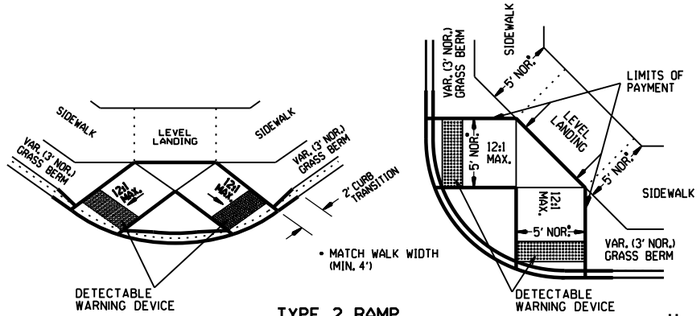
THE DETECTABLE WARNING DEVICE SHALL BE LOCATED SO THAT THE NEAREST EDGE OF THE DEVICE IS 6 TO 8 INCHES FROM THE FACE OF THE CURB.
TRUNCATED DOMES IN THE DETECTABLE WARNING SURFACE SHALL MEET THE REQUIREMENTS OF THE GEOMETRIC CONFIGURATION SHOWN.
DOMES SHALL BE ALIGNED ON A SQUARE GRID IN THE PREDOMINANT DIRECTION OF TRAVEL TO PERMIT WHEELS TO ROLL BETWEEN DOMES.
DETECTABLE WARNING DEVICE SHALL BE 24 INCHES IN THE DIRECTION OF TRAVEL AND EXTEND THE FULL WIDTH OF THE CURB RAMP OR FLUSH SURFACE.
DETECTABLE WARNING DEVICE SHALL BE ON THE AHTD QUALIFIED PRODUCTS LIST FOR CAST-IN-PLACE TACTILE PANELS (ADA DETECTABLE WARNING).



DETECTABLE WARNING DEVICE DETAIL

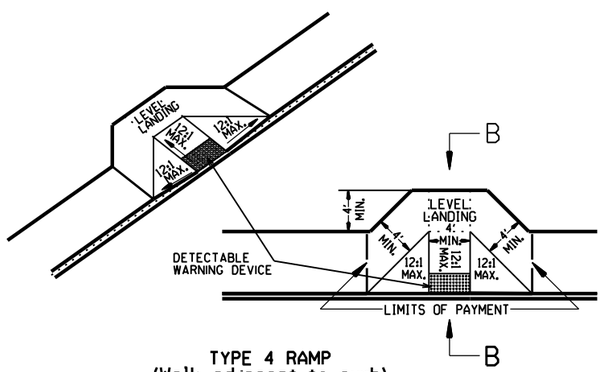
GENERAL NOTES:

IN NEW CONSTRUCTION, UNLESS OTHERWISE INDICATED ON THE PLANS, WHEELCHAIR RAMPS ARE TO BE PROVIDED AT ALL CORNERS OF CURBED STREET INTERSECTIONS AND MID-BLOCK CROSSWALK LOCATIONS.
IN ALTERATIONS WHEELCHAIR RAMPS ARE TO BE PROVIDED AT CURBED STREET INTERSECTIONS WITH PEDESTRIAN TRAFFIC AND MID-BLOCK CROSSWALK LOCATIONS.
THE LENGTH OF THE RAMP SHALL BE SUCH THAT THE SLOPE DOES NOT EXCEED 12:1. THE SURFACE TEXTURE OF THE RAMP SHALL CONFORM TO A CLASS 6 FINISH ACCORDING TO SECTION 802.19.
THE NORMAL GUTTER GRADE SHALL BE MAINTAINED THROUGH THE AREA OF THE RAMP.
ALL PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION.
THE MINIMUM THICKNESS OF THE RAMP, WALK, & LANDING SHALL BE 4".
THE MINIMUM WIDTH OF THE RAMPS SHALL BE THE WALK WIDTH OR 36", WHICHEVER IS GREATER.
RAMPS SHALL BE MODIFIED AS NECESSARY TO INSURE THAT THEY ARE PARALLEL TO A LINE DRAWN FROM THE CENTER OF ONE RAMP TO THE CENTER OF THE RAMP ON THE OPPOSITE SIDE OF THE INTERSECTION.
THE DIMENSIONS AND QUANTITIES SHOWN ON THIS DRAWING ARE FOR A 90° INTERSECTION ONLY. DIMENSIONS AND QUANTITIES FOR SKEWED INTERSECTIONS WILL VARY, AND ARE TO BE DETERMINED BY THE ENGINEER.

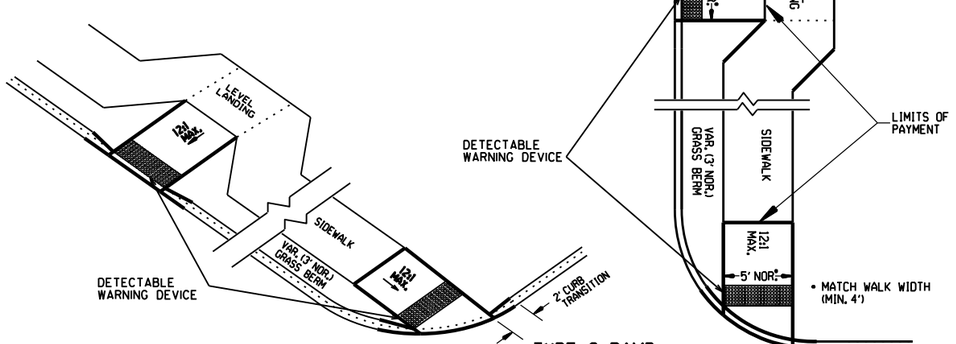


TYPE 2 RAMP

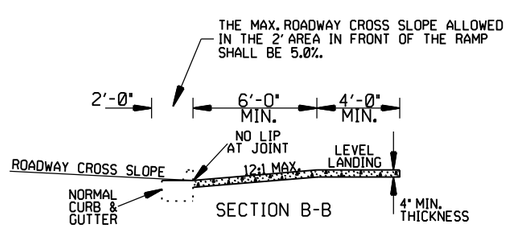
NOTE:
THE CROSS SLOPE OF THE RAMPS, LEVEL LANDINGS, AND SIDEWALKS SHALL NOT EXCEED 2.0% UNLESS REQUIRED TO MATCH STREET LONGTITUDINAL GRADE.



TYPE 4 RAMP
(Walk adjacent to curb)



TYPE 3 RAMP



SECTION B-B

RAMP SELECTION CRITERIA

FIRST CHOICE	TYPE 1	CORNER LOCATIONS WITH THE WALK ADJACENT TO THE CURB (BOTH NEW CONSTRUCTION AND ALTERATIONS).
	TYPE 2	CORNER LOCATIONS WITH THE WALK OFFSET FROM THE CURB A DISTANCE INSUFFICIENT TO ALLOW THE REQUIRED RAMP SLOPE (BOTH NEW CONSTRUCTION AND ALTERATIONS).
	TYPE 3	CORNER LOCATIONS WITH THE WALK OFFSET FROM THE CURB A DISTANCE SUFFICIENT TO ALLOW THE REQUIRED RAMP SLOPE (BOTH NEW CONSTRUCTION AND ALTERATIONS).
	TYPE 4	TANGENT LOCATIONS (BOTH NEW CONSTRUCTION AND ALTERATIONS).
SECOND CHOICE	TYPE 5	TANGENT LOCATIONS (ALTERATIONS ONLY).
THIRD CHOICE	TYPE 6	CORNER LOCATIONS (ALTERATIONS ONLY). THIS RAMP MAY BE USED ONLY IF THE TYPE 5 RAMPS CANNOT BE PLACED AT THE ENDS OF THE RADIUS.
FOURTH CHOICE		IF SITE CONSTRAINTS PREVENT THE CONSTRUCTION OF ANY OF THE TYPES LISTED, THEN AND ONLY THEN CAN THE 12:1 MAX. SLOPE ON THE RAMP BE EXCEEDED TO PROVIDE ACCESS TO THE STREET LEVEL (ALTERATIONS ONLY). THE SLOPE CAN BE STEEPENED TO A 10:1 MAX. FOR A MAX. LENGTH OF 5' OR A 8:1 MAX. FOR A MAX. LENGTH OF 2'. SLOPES STEEPER THAN 8:1 ARE NOT ALLOWED UNDER ANY CIRCUMSTANCES.

NOTE: IN ALTERATIONS, THE SELECTION OF THE TYPE OF WHEELCHAIR RAMP TO BE CONSTRUCTED SHALL BE BASED ON THE AMOUNT OF RIGHT-OF-WAY AVAILABLE, AND ON THE PRESENCE OF OTHER SITE CONSTRAINTS (UTILITIES, BUILDINGS, ETC.). THE TABLE ABOVE LISTS THE ORDER IN WHICH THE RAMPS ARE TO BE CONSIDERED.

AN ALTERATION IS DEFINED AS A PROJECT THAT CHANGES OR AFFECTS THE USE OF A PEDESTRIAN PATHWAY (OVERLAYS, SIGNALIZATION PROJECTS, ETC.) BUT DOES NOT REQUIRE THE PURCHASE OF ADDITIONAL RIGHT-OF-WAY. ALL PROJECTS THAT REQUIRE THE PURCHASE OF ADDITIONAL RIGHT-OF-WAY WILL USUALLY BE CONSIDERED NEW CONSTRUCTION FOR THE PURPOSES OF THE CHART ABOVE.

11-10-05	REVISED TO NEW SIDEWALK POLICY	
10-9-03	REVISED GEN. NOTES & ADDED NOTE	
4-10-03	REV. DETECTABLE WARNING DEVICES	
8-22-02	ADD DETECTABLE WARNING DEVICES	
3-30-00	ADD. SLOPE TRANS. & REV. ISL. DIMS.	
11-18-98	REVISED NOTES	
8-12-98	REVISED TEXTURE	
7-02-98	REDRAWN & REISSUED	
10-18-96	CORRECTED DIMENSIONS	10-18-96
5-24-90	FROM@8TO12MAX.SLOPES	5-24-90
7-15-88	ADJUSTED MAX. SLOPE	652-7-15-88
7-14-88	INCLUD."CONC. ISLD."IN PAY ITEM	------
6-02-76	ISSUED-P.H.D.	299-7-28-76
DATE	REVISION	DATE FILM

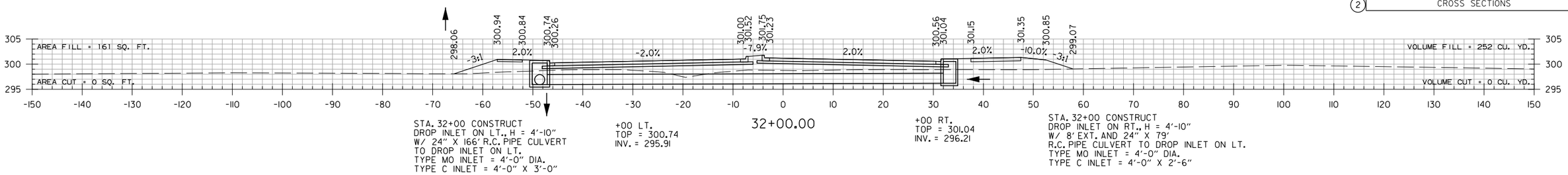
ARKANSAS STATE HIGHWAY COMMISSION

WHEELCHAIR RAMPS NEW CONSTRUCTION AND ALTERATIONS

STANDARD DRAWING WR-1

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080517	142	182

(2) CROSS SECTIONS



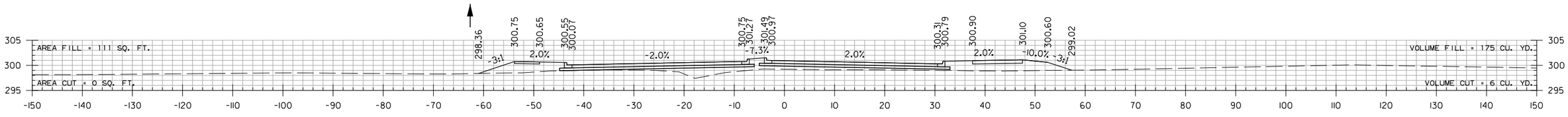
STA. 32+00 CONSTRUCT
DROP INLET ON LT., H = 4'-10"
W/ 24" X 166' R.C. PIPE CULVERT
TO DROP INLET ON LT.
TYPE MO INLET = 4'-0" DIA.
TYPE C INLET = 4'-0" X 3'-0"

+00 LT.
TOP = 300.74
INV. = 295.91

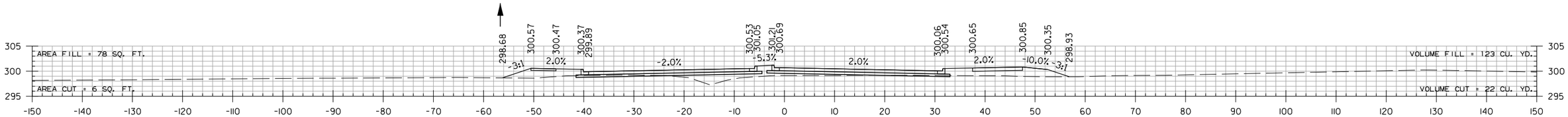
32+00.00

+00 RT.
TOP = 301.04
INV. = 296.21

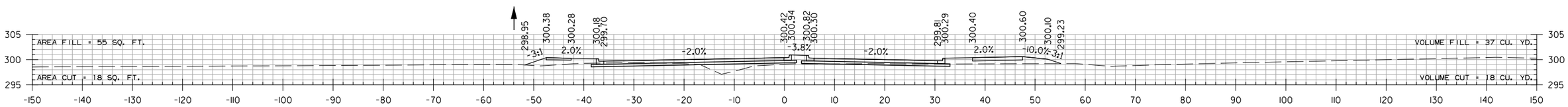
STA. 32+00 CONSTRUCT
DROP INLET ON RT., H = 4'-10"
W/ 8' EXT. AND 24" X 79'
R.C. PIPE CULVERT TO DROP INLET ON LT.
TYPE MO INLET = 4'-0" DIA.
TYPE C INLET = 4'-0" X 2'-6"



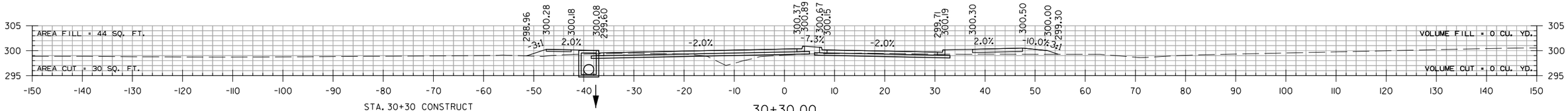
31+50.00



31+00.00



30+50.00



STA. 30+30 CONSTRUCT
DROP INLET ON LT., H = 4'-10"
MATCH CITY OF CONWAY PROJECT
TYPE MO INLET = 4'-0" DIA.
TYPE C INLET = 4'-0" X 3'-0"

+30 LT.
TOP = 300.08
INV. = 295.25

30+30.00

STA. 30+30.00 BEGIN CONSTRUCTION

6TH STREET
STA. 30+30 TO STA. 32+00

rccorbyn 5/20/2015 7:13:41 AM
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REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080517	143	182

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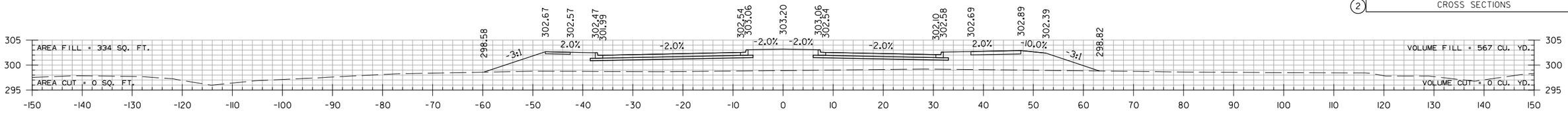
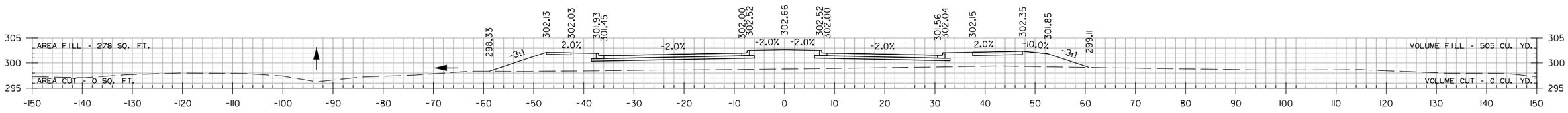
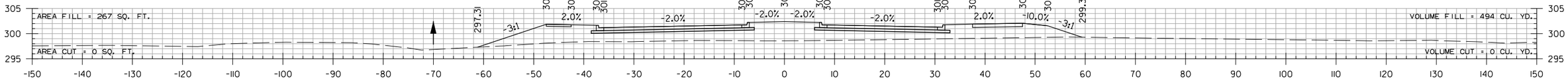


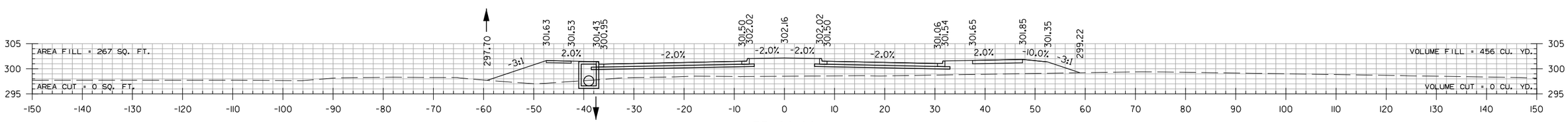
34+50.00



34+00.00



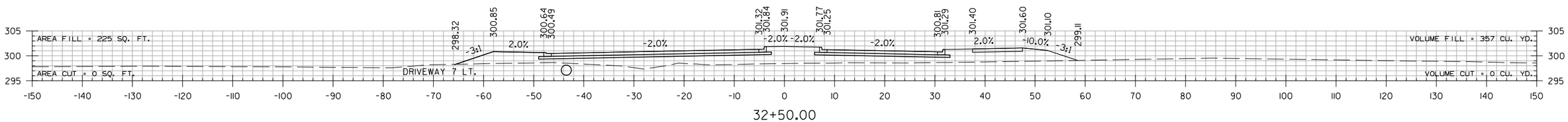
33+50.00



33+00.00

STA. 33+00 CONSTRUCT
DROP INLET ON LT., H = 4'-10"
W/ 8' EXT. AND 24" X 96'
R.C. PIPE CULVERT TO DROP INLET ON LT.
TYPE MO INLET = 4'-0" DIA.
TYPE C INLET = 4'-0" X 3'-0"

+00 LT.
TOP = 301.43
INV. = 296.60



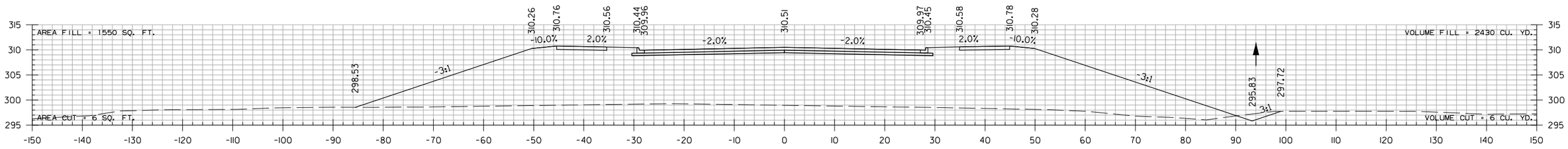
32+50.00

6TH STREET
STA. 32+50 TO STA. 34+50

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

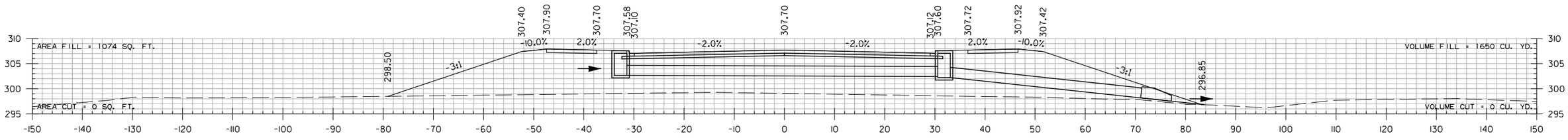
FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080517	144	182

(2) CROSS SECTIONS



36+50.00

STA. 36+29.70 RT.
BEGIN SP. DT. RT.
ELEV. = 296.08



36+00.00

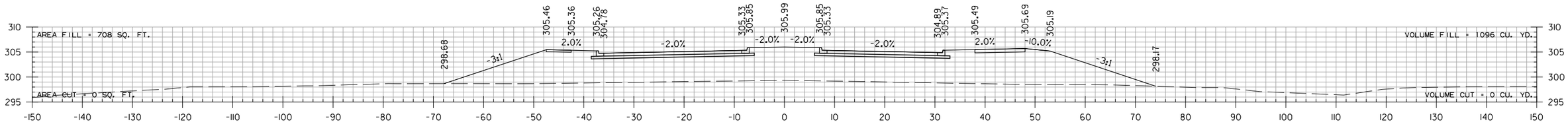
STA. 36+00 CONSTRUCT
DROP INLET ON LT., H = 4'-11"
W/ 4' EXT. AND 24" X 62'
R.C. PIPE CULVERT TO DROP INLET ON RT.
TYPE MO INLET = 4'-0" DIA.
TYPE C INLET = 4'-0" X 2'-6"

+00 LT.
TOP = 307.58
INV. = 302.66

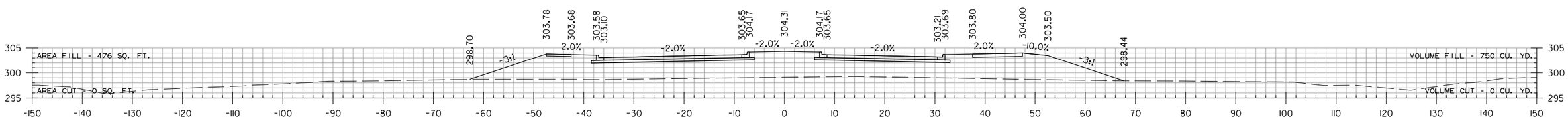
+00 RT.
TOP = 307.60
FL IN = 302.45
FL OUT = 302.35

STA. 36+00 CONSTRUCT
DROP INLET ON RT., H = 5'-3"
W/ 4' EXT. AND 24" X 39'
R.C. PIPE CULVERT TO FES ON RT.
TYPE MO INLET = 4'-0" DIA.
TYPE C INLET = 4'-0" X 2'-6"

+00 FES RT.
FL. = 296.85



35+50.00



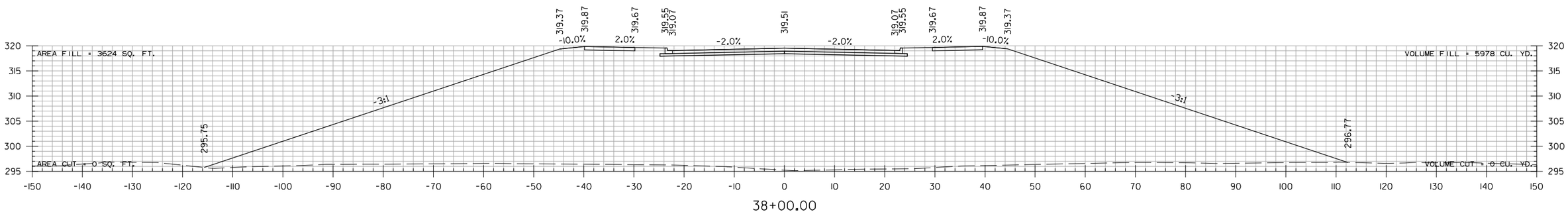
35+00.00

6TH STREET
STA. 35+00 TO STA. 36+50

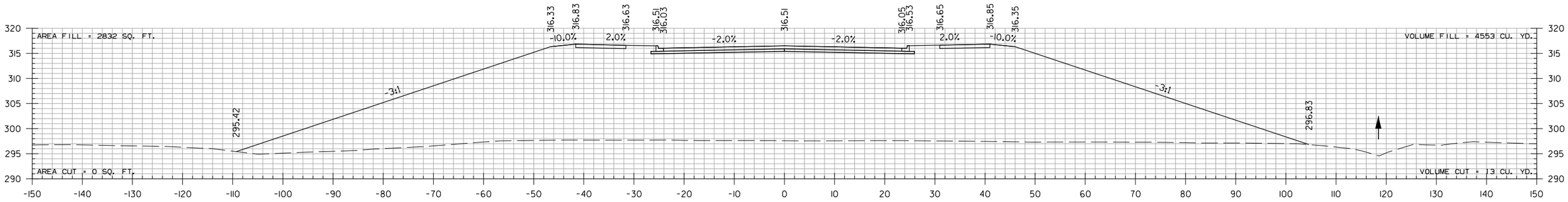
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080517	145	182

(2) CROSS SECTIONS

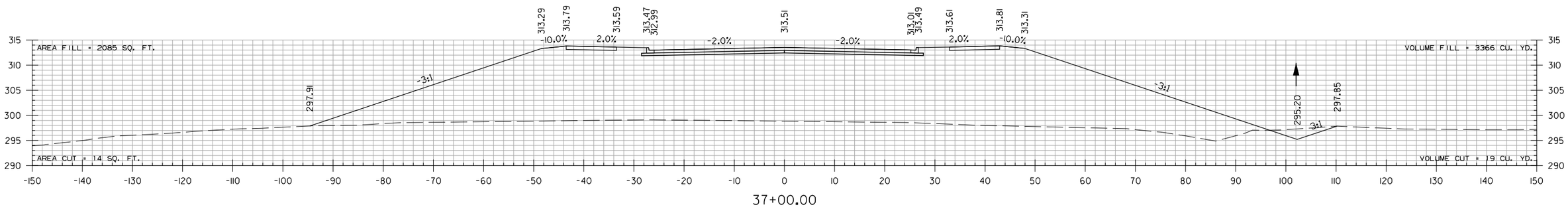


38+00.00



37+50.00

STA. 37+35.27 RT.
END SP. DT. RT.
ELEV. = 294.74



37+00.00

6TH STREET
STA. 37+00 TO STA. 38+00

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REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080517	146	182
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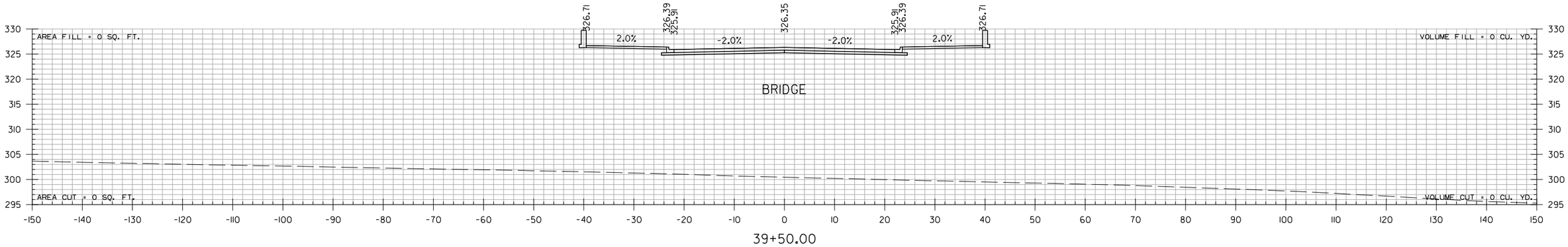
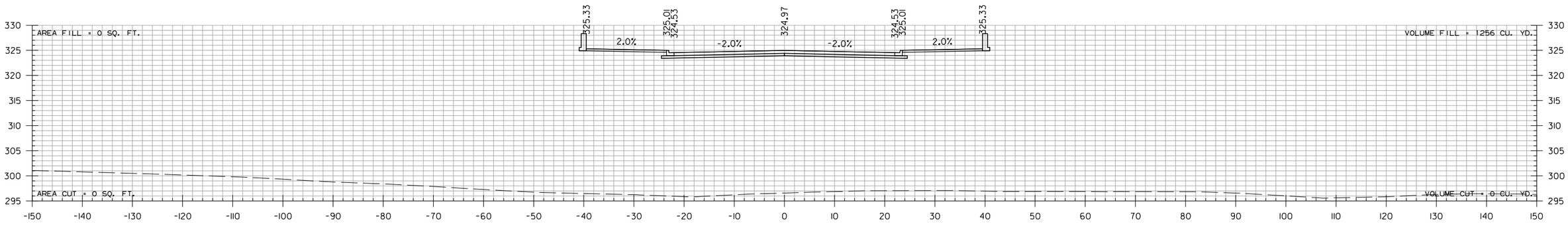


39+50.00



39+00.00

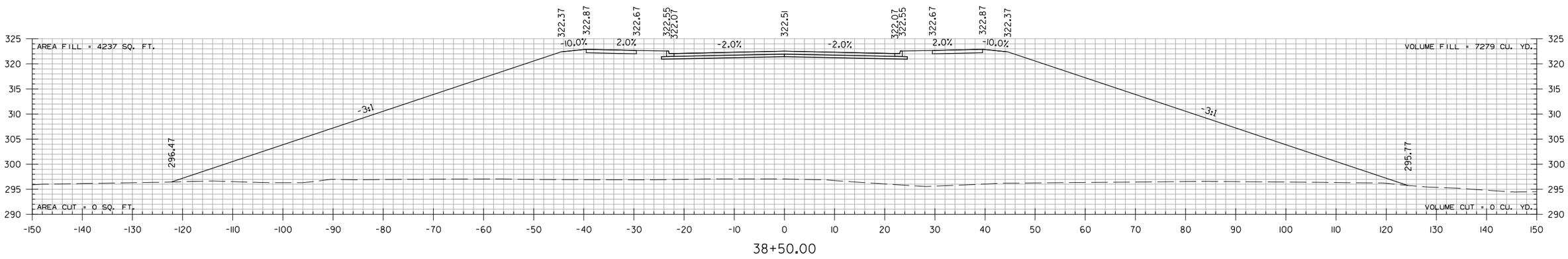
AREA FILL = 4237 SQ. FT.

VOLUME FILL = 5334 CU. YD.

STA. 38+83.99 BEGIN BRIDGE

AREA CUT = 0 SQ. FT.

VOLUME CUT = 0 CU. YD.



38+50.00

6TH STREET
STA. 38+50 TO STA. 39+50

rccarbyn 5/20/2015 7:13:42 AM
WORKSPACE: AHTD
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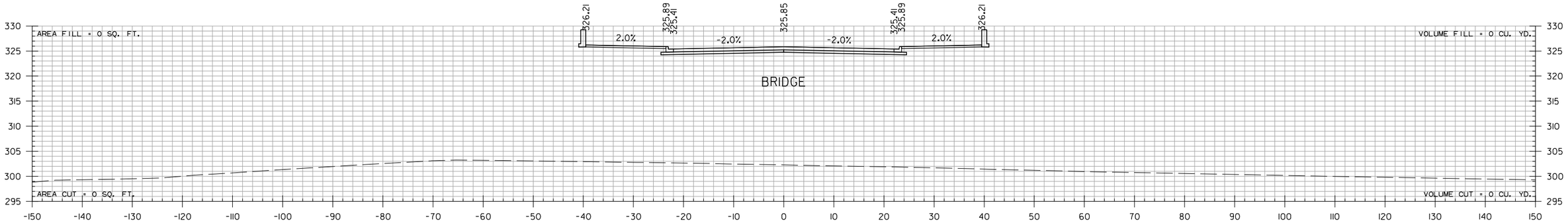
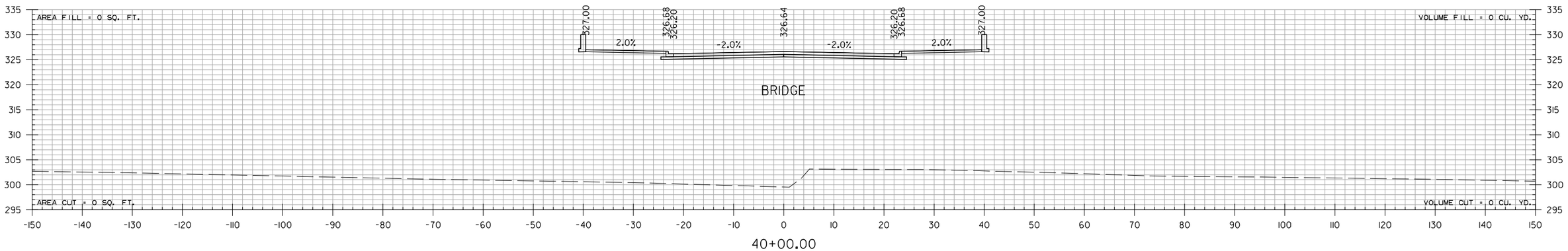
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080517	147	182
(2)	CROSS SECTIONS			



40+50.00



40+00.00

6TH STREET
STA. 40+00 TO STA. 40+50

rccorbyn 5/20/2015 7:13:43 AM
WORKSPACE: AHTD
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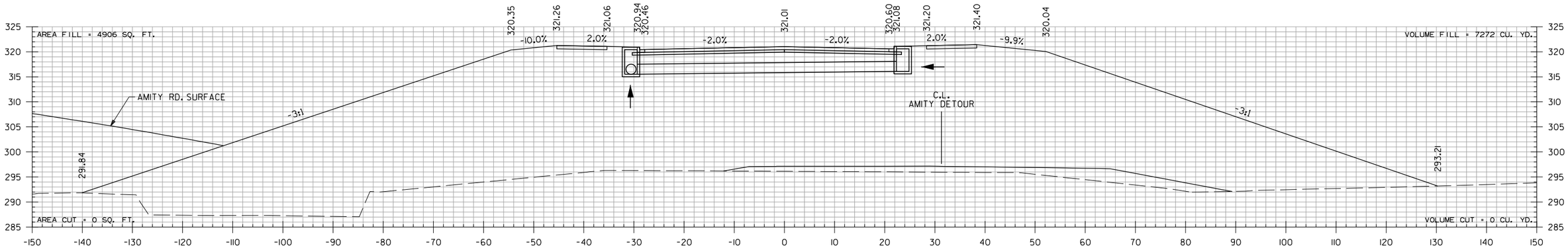
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080517	148	182
(2)	CROSS SECTIONS			



41+50.00

STA. 41+50 CONSTRUCT
DROP INLET ON LT., H = 5'-5"
W/ 4' EXT. AND 24" X 41'
R.C. PIPE CULVERT TO DROP INLET ON LT.
TYPE MO INLET = 4'-0" DIA.
TYPE C INLET = 4'-0" X 2'-6"

+50 LT.
TOP = 320.94
INV. = 315.52

+50 RT.
TOP = 321.08
INV. = 316.08

STA. 41+50 CONSTRUCT
DROP INLET ON RT., H = 5'-0"
W/ 4' EXT. AND 24" X 51'
R.C. PIPE CULVERT TO DROP INLET ON LT.
TYPE MO INLET = 4'-0" DIA.
TYPE C INLET = 4'-0" X 2'-6"

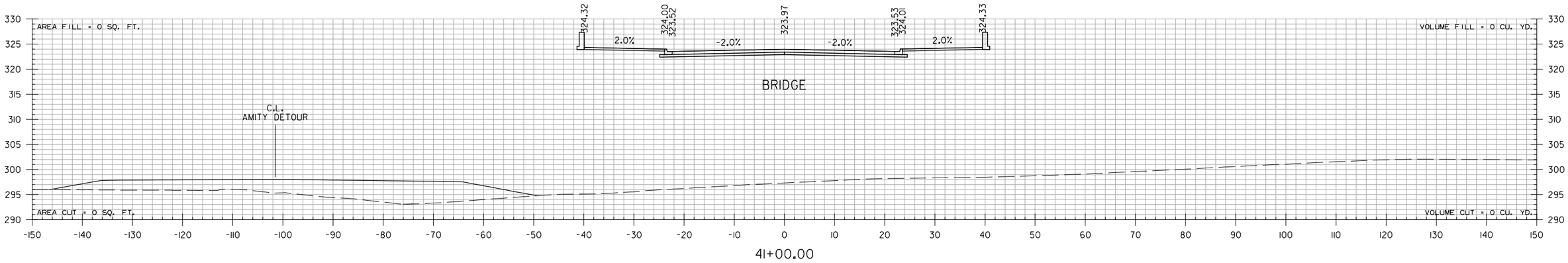
AREA FILL = 4906 SQ. FT.

VOLUME FILL = 907 CU. YD.

AREA CUT = 0 SQ. FT.

VOLUME CUT = 0 CU. YD.

STA. 41+09.98 END BRIDGE



41+00.00

6TH STREET
STA. 41+00 TO STA. 41+50

rccarbyn 5/20/2015 7:13:43 AM
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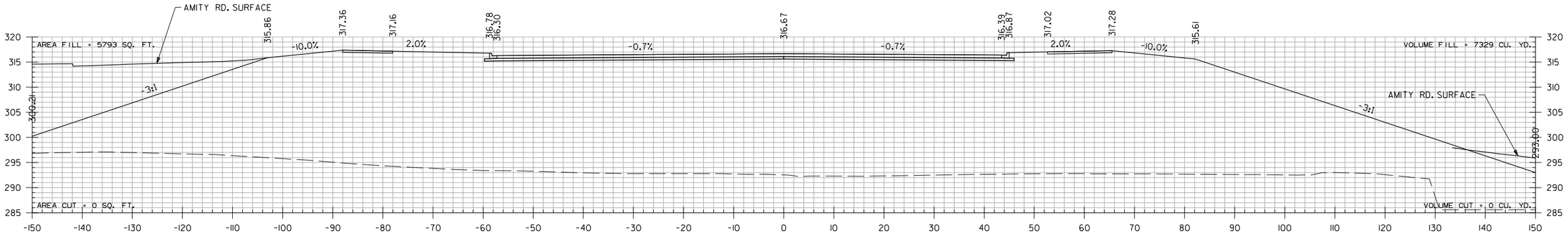
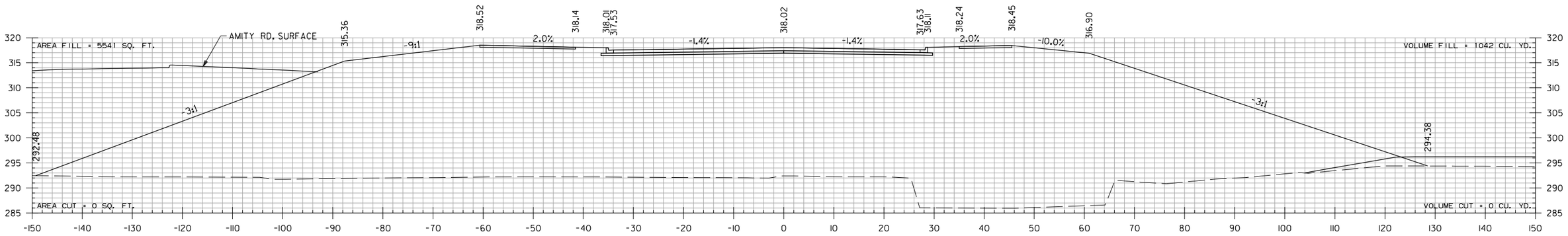
REVISED DATE:

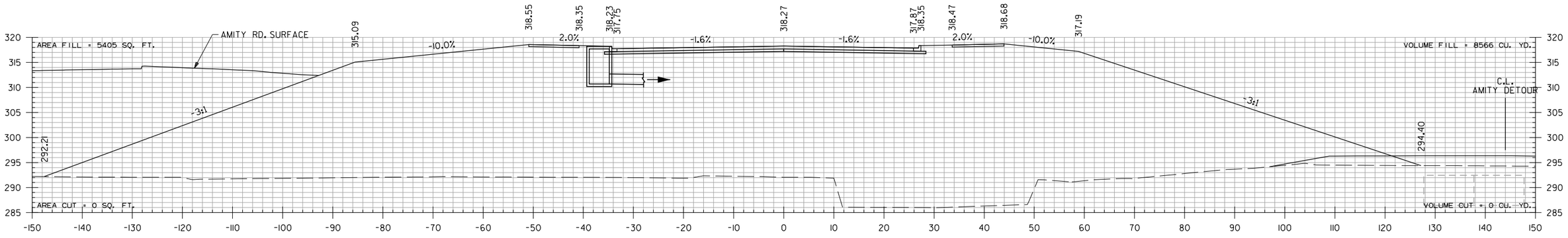
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080517	149	182
				(2)	CROSS SECTIONS			



42+34.92



42+00.00



41+94.86

STA. 41+95 CONSTRUCT
DROP INLET ON LT., H = 5'-2"
W/ 24" X 106'
R.C. PIPE CULVERT TO DROP INLET ON RT.
TYPE MO INLET = 4'-0" DIA.
TYPE C INLET = 4'-0" X 2'-6"

+95 LT.
TOP = 318.23
FL IN = 313.16
FL OUT = 313.06

6TH STREET
STA. 41+95 TO STA. 42+35

rccorbyn 5/20/2015 7:13:43 AM
WORKSPACE: AHTD
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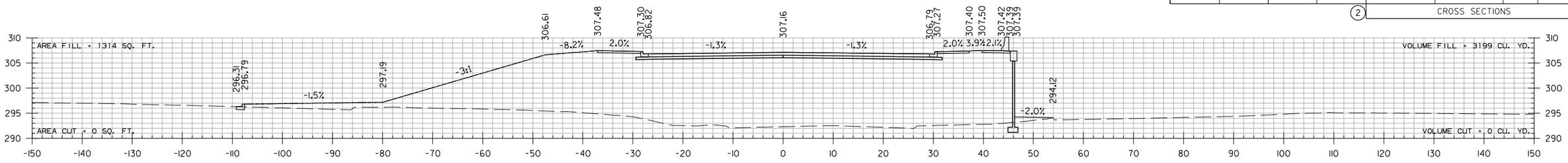
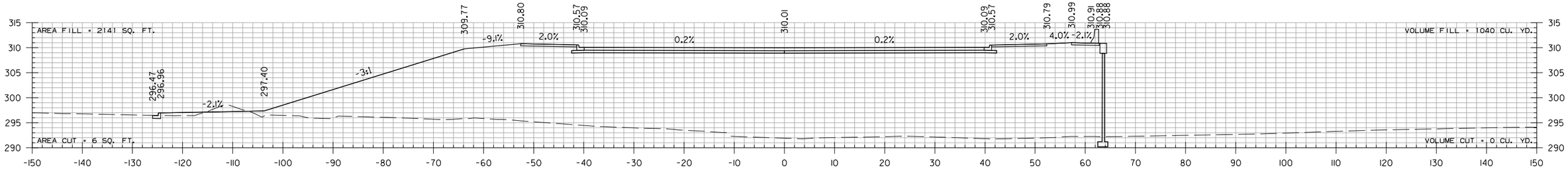
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080517	150	182

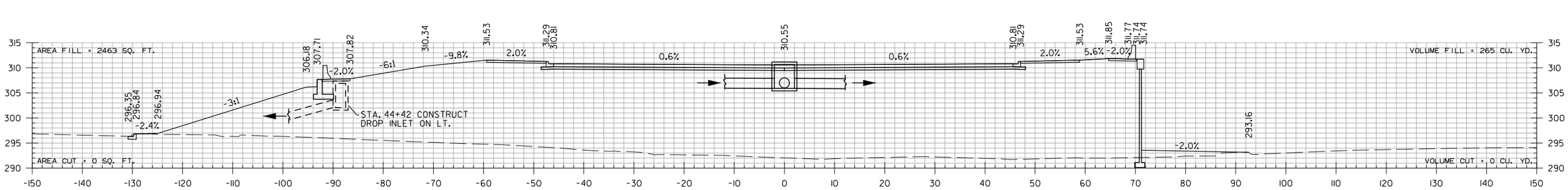
(2) CROSS SECTIONS



45+00.00



44+50.00



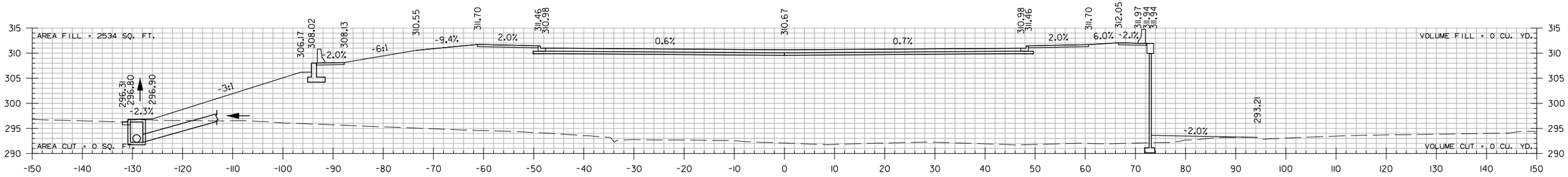
44+37.80

STA. 44+42 CONSTRUCT
DROP INLET ON LT., H = 5'-4"
W/ 18" X 41' R.C. PIPE CULVERT
TO DROP INLET ON LT.
TYPE E INLET = 3'-6" X 2'-0"

+42 LT.
TOP = 307.42
INV. = 302.07

+38 CL.
TOP = 311.17
FL. IN = 306.02
FL. IN = 305.92
FL. OUT = 305.92

STA. 44+38 CONSTRUCT
DROP INLET ON C.L., H = 5'-3"
W/ 24" X 77'
R.C. PIPE CULVERT TO DROP INLET ON RT.
TYPE MO INLET = 4'-0" DIA.
TYPE C INLET = 4'-0" X 3'-6"



+35 LT.
TOP = 296.80
INV. = 292.27

STA. 44+35 CONSTRUCT
DROP INLET ON LT., H = 4'-6"
W/ DBL. 4' EXT. AND 18" X 143'
R.C. PIPE CULVERT TO DROP INLET ON LT.
TYPE MO INLET = 4'-0" DIA.
TYPE C INLET = 4'-0" X 2'-6"

44+34.94

STA. 44+34.94 BEGIN ELSINGER BLVD.

ELSINGER BLVD.
STA. 44+35 TO STA. 45+00

rccorbyn 5/20/2015 7:43:43 AM
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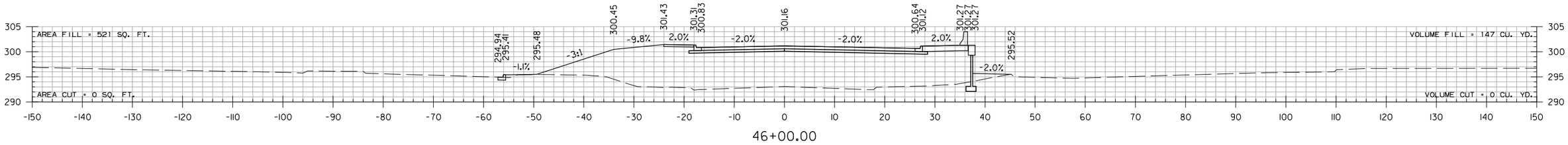
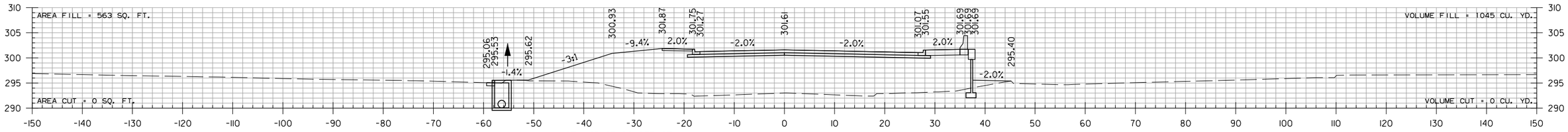
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080517	151	182

(2) CROSS SECTIONS



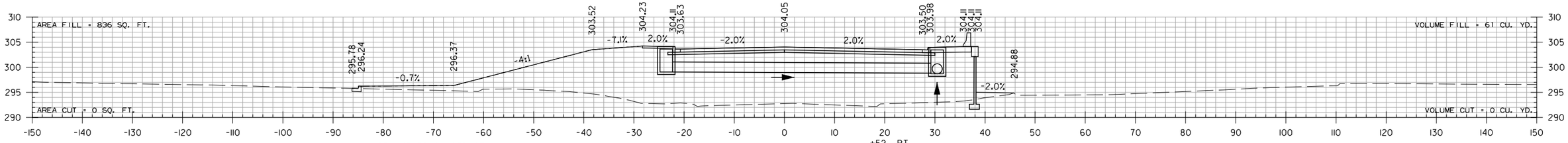
46+00.00



45+92.66

+93 RT.
TOP = 295.53
INV. = 290.05

STA. 45+93 CONSTRUCT
DROP INLET ON LT., H = 5'-6"
W/ 18" X 95' R.C. PIPE CULVERT
TO DROP INLET ON LT.
TYPE MO INLET = 4'-0" DIA.
TYPE C INLET = 4'-0" X 2'-10"



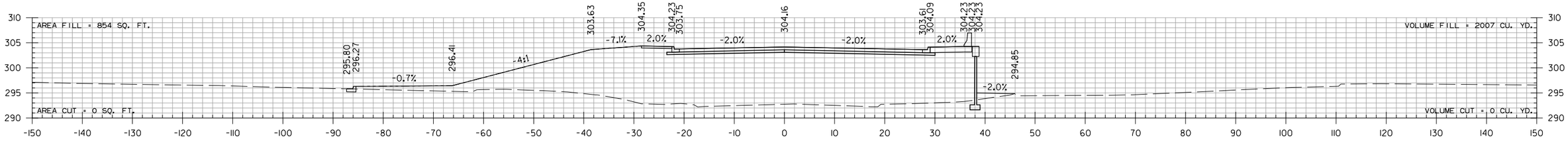
STA. 45+52 CONSTRUCT
DROP INLET ON LT., H = 5'-0"
W/ 4' EXT. AND 24" X 51'
R.C. PIPE CULVERT TO DROP INLET ON RT.
TYPE MO INLET = 4'-0" DIA.
TYPE C INLET = 4'-0" X 2'-6"

+52 LT.
TOP = 304.11
INV. = 299.11

45+51.95

+52 RT.
TOP = 303.98
FL. IN = 298.83
FL. OUT = 298.73

STA. 45+52 CONSTRUCT
DROP INLET ON RT., H = 5'-3"
W/ 4' EXT. AND 24" X 110'
R.C. PIPE CULVERT TO DROP INLET ON RT.
TYPE MO INLET = 4'-0" DIA.
TYPE C INLET = 4'-0" X 2'-6"



45+50.00

ELSINGER BLVD.
STA. 45+50 TO STA. 46+00

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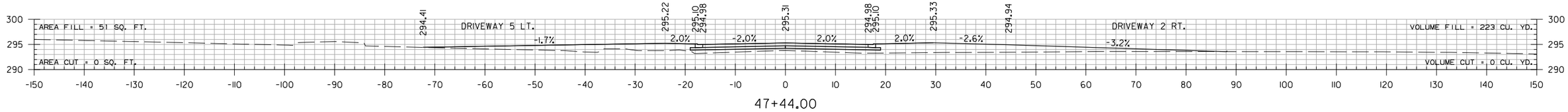
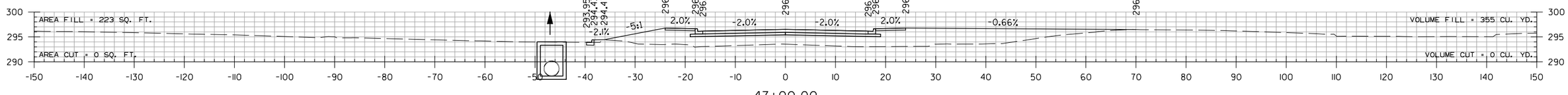
				6	ARK.			
				JOB NO.		080517	152	182
				(2)	CROSS SECTIONS			



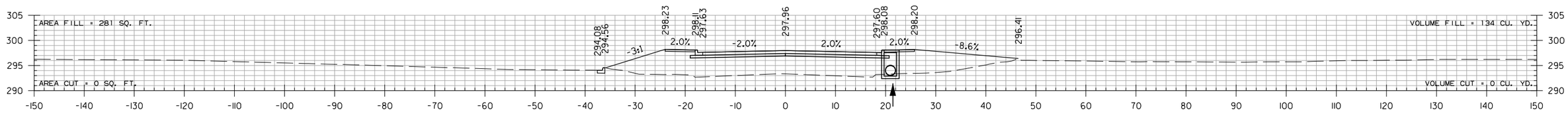
47+44.00



47+00.00

+98 RT.
TOP = 293.84
INV. = 287.17

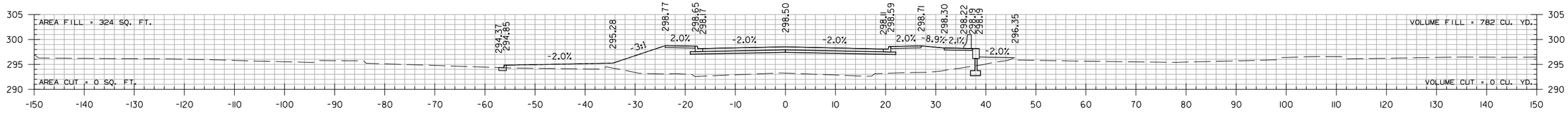
STA. 46+98 IN PLACE
36" X 157' R.C. PIPE CULVERT ON LT.
REMOVE 40 L.F.
CONSTRUCT
DROP INLET ON LT., H=6'-8"
W/ 36" X 103'
R.C. PIPE CULVERT TO DROP INLET ON LT.
TYPE ST. INLET = 3'-0" X 4'-6"
CONNECT TO EXISTING 36" R.C. PIPE CULVERT



46+62.00

+62 RT.
TOP = 298.08
FL. IN = 293.10
FL. OUT = 293.00

STA. 46+62 CONSTRUCT
DROP INLET ON RT., H = 5'-1"
W/ 24" X 152'
R.C. PIPE CULVERT TO DROP INLET ON RT.
TYPE C INLET = 4'-0" X 2'-6"



46+50.00

ELSINGER BLVD.
STA. 46+50 TO STA. 47+44

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WORKSPACE: AHTD
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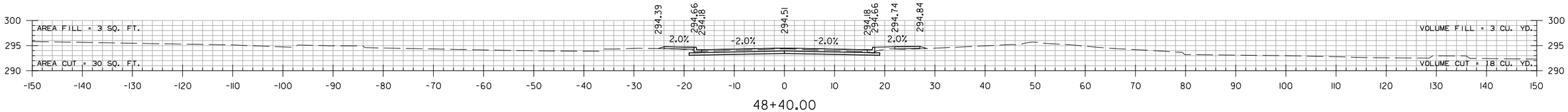
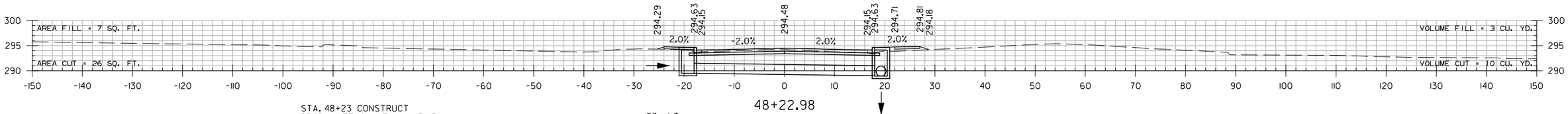
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080517	153	182
				(2)		CROSS SECTIONS		

STA. 48+40.00 END ELSINGER BLVD.



48+40.00



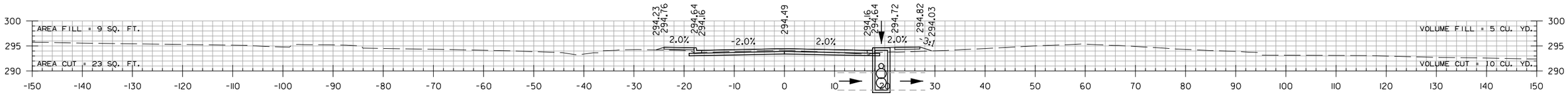
48+22.98

STA. 48+23 CONSTRUCT
DROP INLET ON LT., H = 5'-3"
W/ DBL. 8' EXT. AND 24" X 36'
R.C. PIPE CULVERT TO DROP INLET ON RT.
TYPE MO INLET = 4'-0" DIA.
TYPE C INLET = 4'-0" X 2'-6"

+23 LT.
TOP = 294.63
INV. = 289.40

+23 RT.
TOP = 294.63
FL. IN = 289.00
FL. OUT = 288.90

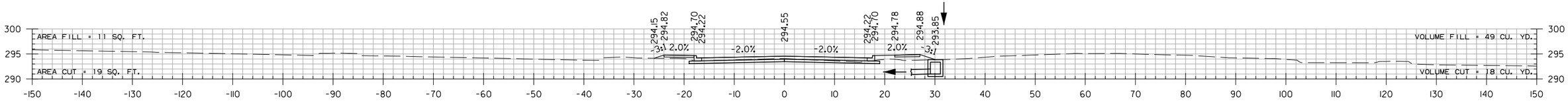
STA. 48+23 CONSTRUCT
DROP INLET ON RT., H = 5'-9"
W/ 4' EXT., AND 24" X 7'
R.C. PIPE CULVERT TO DROP INLET ON RT.
TYPE MO INLET = 4'-0" DIA.
TYPE C INLET = 4'-0" X 2'-6"



48+12.36

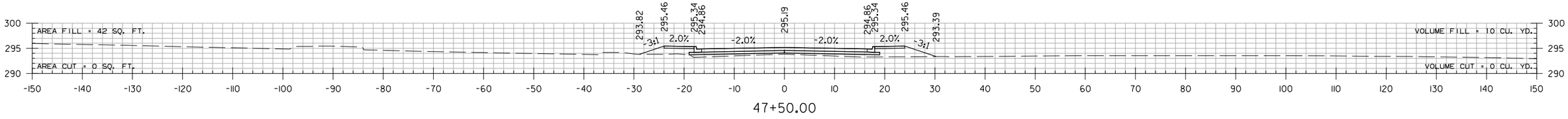
+12 RT.
TOP = 294.64
FL. IN = 290.50
FL. IN = 288.50
FL. IN = 286.66
FL. OUT = 286.18

STA. 48+12 IN PLACE
42" R.C. PIPE CULVERT - RETAIN
CONSTRUCT
DROP INLET ON RT., H= 8'-6"
TYPE MO INLET = 5'-0" DIA.
TYPE C INLET = 4'-4" X 2'-6"



48+00.00

STA. 48+00 CONSTRUCT
YARD DRAIN ON RT.
TOP = 293.85, H=2'-10"
W/ 12" X 15' R.C. PIPE CULVERT
TO DROP INLET ON RT.



47+50.00

ELSINGER BLVD.
STA. 47+50 TO STA. 48+40

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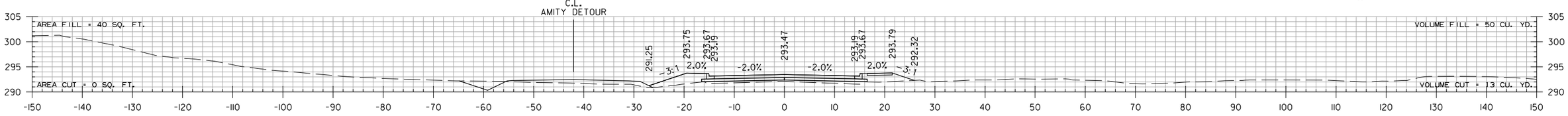
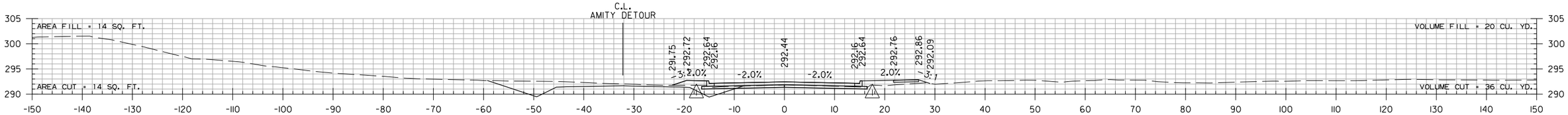
2-10-2016				6	ARK.			
				JOB NO.		080517	154	182
				(2)	CROSS SECTIONS			



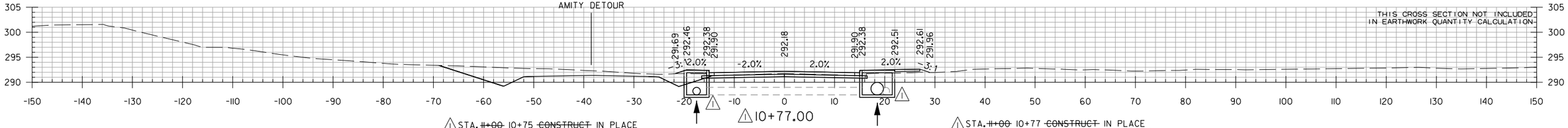
11+50.00



11+00.00

⚠1 ~~+00 LT.~~
~~TOP = 292.64~~
~~FL. IN = 287.57~~
~~FL. OUT = 287.47~~

⚠1 ~~+00 RT.~~
~~TOP = 292.64~~
~~FL. IN = 287.57~~
~~FL. OUT = 287.47~~



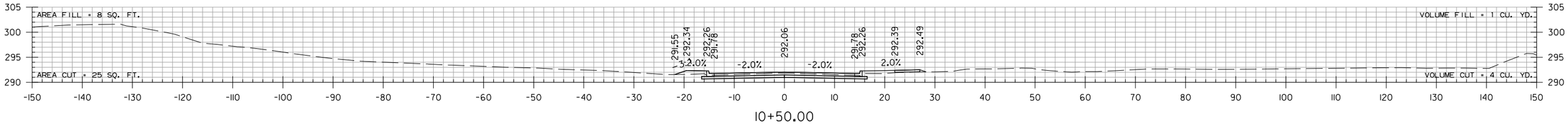
10+77.00

⚠1 STA. ~~11+00~~ 10+75 ~~CONSTRUCT~~ IN PLACE
DROP INLET ON LT., ~~H = 5'-2"~~ - RETAIN
AND 18" X 34' R.C. PIPE CULVERT - RETAIN
ADJUST DROP INLET TO GRADE
~~W/ 18" X 95'~~
~~R.C. PIPE CULVERT TO DROP INLET ON LT.~~
TYPE MO INLET = ~~4'-0"~~ MATCH EXISTING DIA.
~~TYPE C INLET = 4'-0" X 2'-6"~~

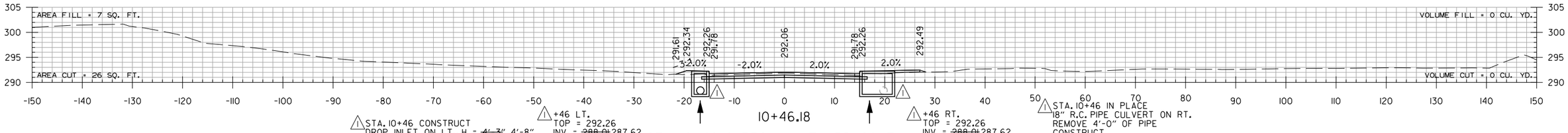
⚠1 +75 LT.
EXIST TOP = 291.73
PROP TOP = 292.38
INV. = 287.47

⚠1 +77 RT.
EXIST TOP = 291.85
PROP TOP = 292.38
INV. = 287.45

⚠1 STA. ~~11+00~~ 10+77 ~~CONSTRUCT~~ IN PLACE
DROP INLET ON RT., ~~H = 5'-2"~~ - RETAIN
AND 36" X 149' R.C. PIPE CULVERT - REMOVE
ADJUST DROP INLET TO GRADE
W/ ~~18"~~ 30" X ~~93'~~ 116'
R.C. PIPE CULVERT TO DROP INLET ON RT.
TYPE MO INLET = ~~4'-0"~~ MATCH EXISTING DIA.
~~TYPE C INLET = 4'-0" X 2'-6"~~



10+50.00



10+46.18

⚠1 STA. 10+46 CONSTRUCT
DROP INLET ON LT., H = ~~4'-3"~~ 4'-8"
W/ DBL. 4' EXT. AND 18" X ~~49'~~ 24'
R.C. PIPE CULVERT TO DROP INLET ON LT.
TYPE MO INLET = 4'-0" DIA.
TYPE C INLET = 4'-0" X 2'-6"

⚠1 +46 LT.
TOP = 292.26
INV. = ~~288.01~~ 287.62

⚠1 +46 RT.
TOP = 292.26
INV. = ~~288.01~~ 287.62

⚠1 STA. 10+46 IN PLACE
18" R.C. PIPE CULVERT ON RT.
REMOVE 4'-0" OF PIPE
CONSTRUCT
DROP INLET ON RT., H = ~~4'-3"~~ 4'-8"
W/ DBL. 4' EXT. ~~AND 18" X 50'~~
~~R.C. PIPE CULVERT TO DROP INLET ON RT.~~
TYPE MO INLET = ~~4'-0"~~ 5'-0" DIA.
TYPE C INLET = 4'-0" X ~~2'-6"~~ 6'-0"

STA. 10+46.18 BEGIN AMITY RD. SOUTH

AMITY RD.
STA. 10+46 TO STA. 11+50

rccorbyn 2/10/2016 4:34:25 PM
WORKSPACE: AHTD
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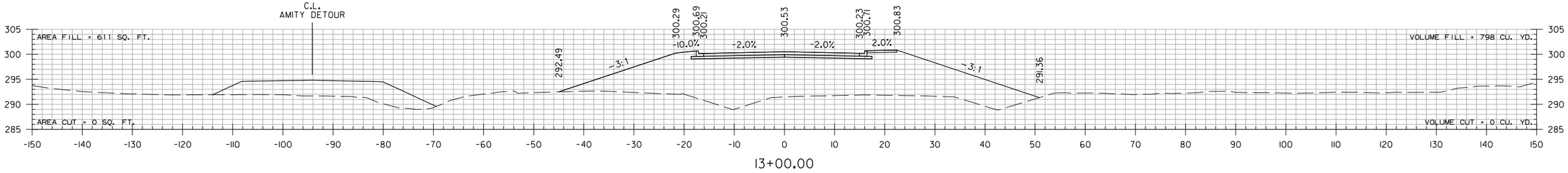
REVISED DATE:

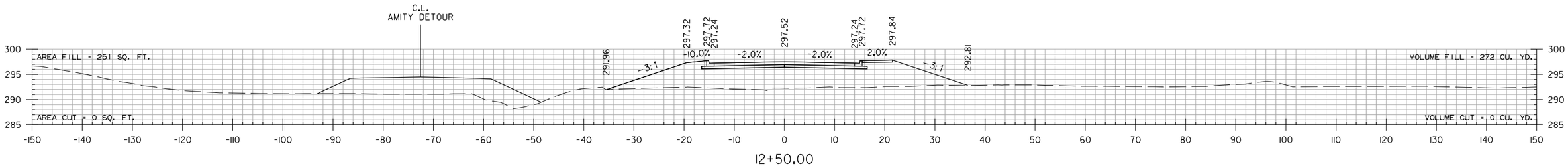
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED
2-10-2016			

FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080517	155	182

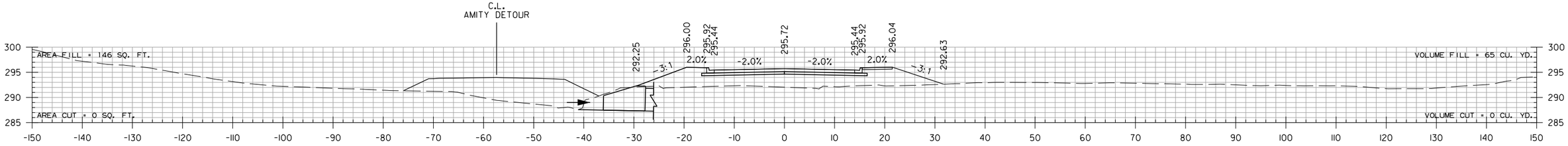
(2) CROSS SECTIONS



13+00.00

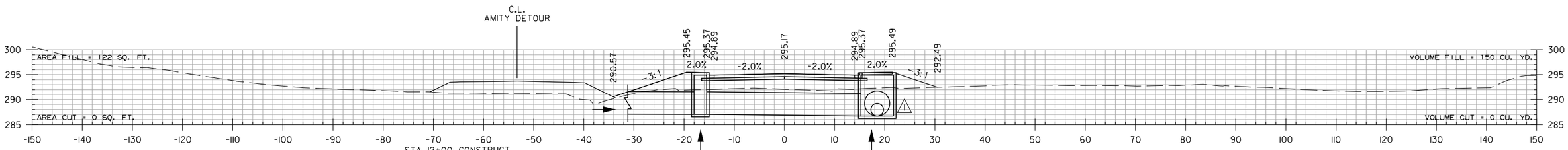


12+50.00



12+13.00

+13 LT. FES
FL. = 287.58



STA. 12+00 CONSTRUCT
DROP INLET ON LT., H = 8'-4"
W/ 54" X 20'
R.C. PIPE CULVERT FROM FES ON LT.
AND 54" X 31'
R.C. PIPE CULVERT TO DROP INLET ON RT.
TYPE MO INLET = 6'-0" DIA.
TYPE C INLET = 7'-0" X 2'-6"

+00 LT.
TOP = 295.37
INV. = 287.04

12+00.00

+00 RT.
TOP = 295.37
INV. = 286.70

STA. 12+00 CONSTRUCT
DROP INLET ON RT., H = 8'-8"
W/ 54" X 219' R.C. PIPE CULVERT
TO R.C. BOX CULVERT ON RT.
TYPE MO INLET = 6'-0" DIA.
TYPE C INLET = 7'-0" X 7'-0"

AMITY RD.
STA. 12+00 TO STA. 13+00

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WORKSPACE: AHTD
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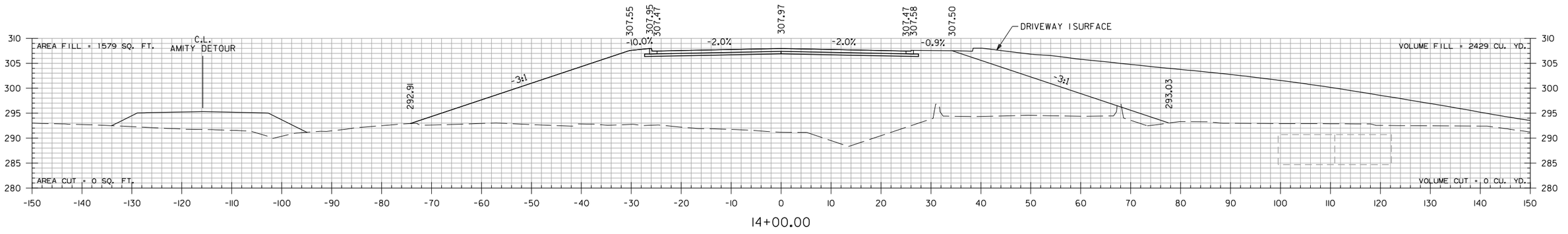
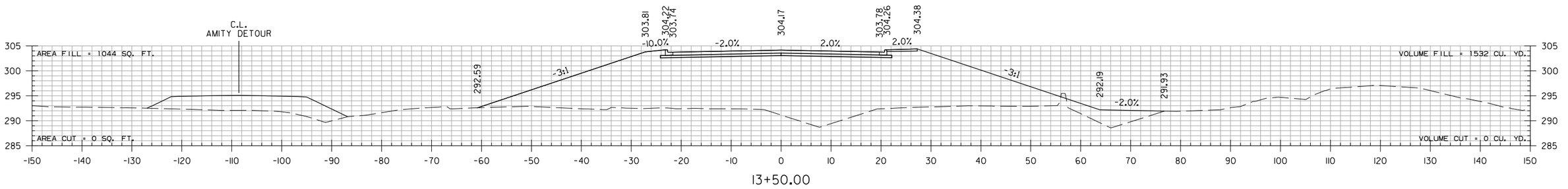
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080517	156	182

(2) CROSS SECTIONS





AMITY RD.
STA. 13+50 TO STA. 14+20

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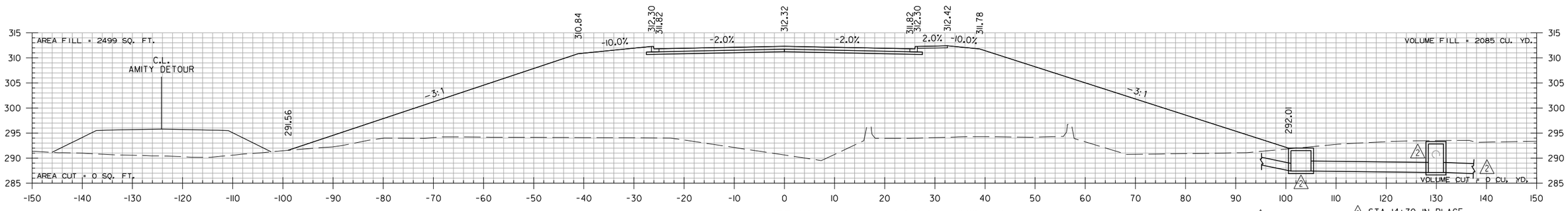
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED
6-1-2015			
2-10-2016			

FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080517	157	182

(2) CROSS SECTIONS



14+75.00

1 STA. 14+75 CONSTRUCT
DROP INLET ~~ON~~ 102.8' RT., H = 4'-7"
W/ 24" X ~~53'~~ 24'

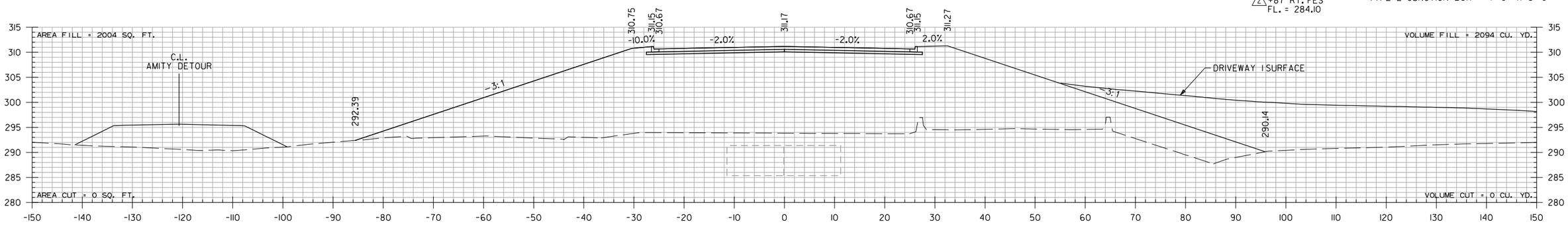
2 R.C. PIPE CULVERT TO ~~R.C.B. CULVERT~~
JUNCTION BOX ON RT.
TYPE E INLET = 6'-0" X 4'-0"

+75 RT.
TOP = 292.01
FL. IN = 287.53
FL. IN = 287.53
FL. OUT = 287.43

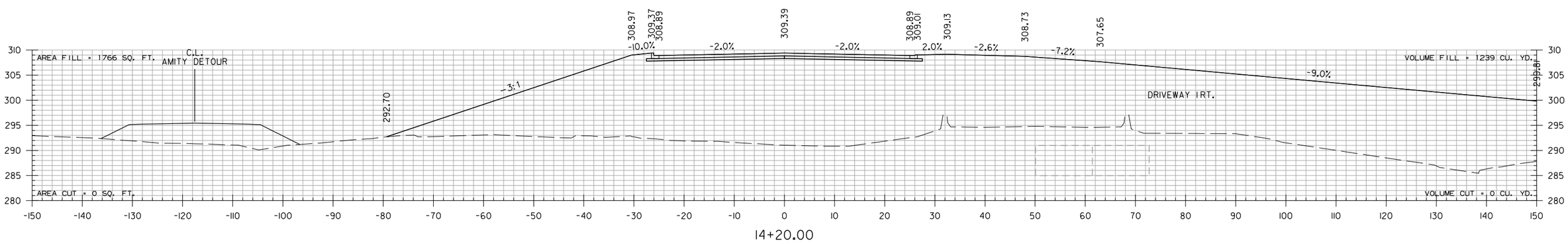
2 +70 RT.
TOP = 293.30
FL. IN = 289.97
FL. IN = 287.13
FL. OUT = 287.13

2 +87 RT. FES
FL. = 284.10

2 STA. 14+70 IN PLACE
18" X 39' PIPE CULVERT - RETAIN 8'
CONSTRUCT
JUNCTION BOX 129.9' RT., H = 6'-2"
W/ 24" X 121' R.C. PIPE CULVERT TO
FES 210.0' RT.
TYPE E JUNCTION BOX = 4'-0" X 3'-0"



14+50.00



14+20.00

AMITY RD.
STA. 14+50 TO STA. 14+75

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WORKSPACE: AHTD
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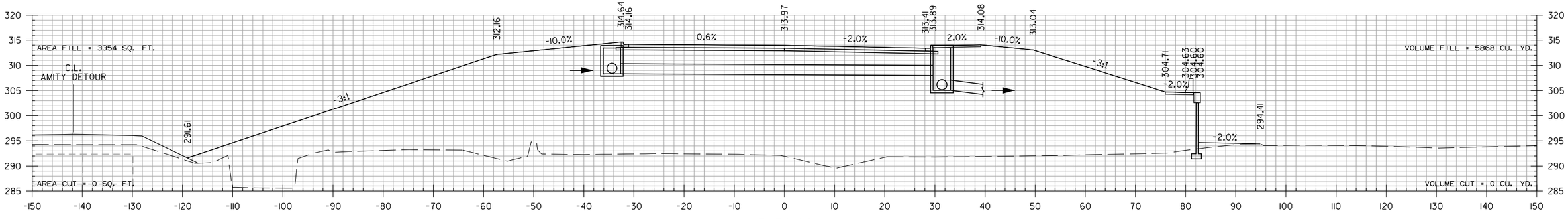
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080517	158	182
				(2)	CROSS SECTIONS			



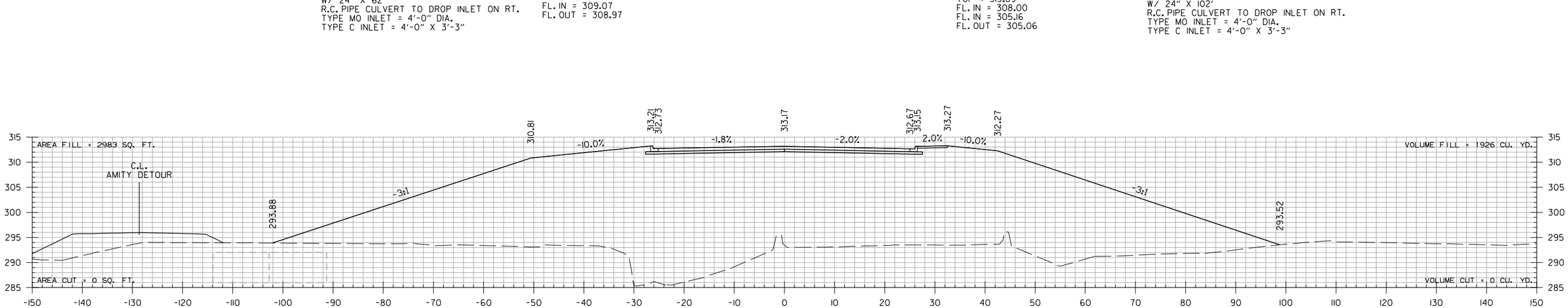
15+50.00

STA. 15+50 CONSTRUCT
DROP INLET ON LT., H = 5'-8"
W/ 24" X 62'
R.C. PIPE CULVERT TO DROP INLET ON RT.
TYPE MO INLET = 4'-0" DIA.
TYPE C INLET = 4'-0" X 3'-3"

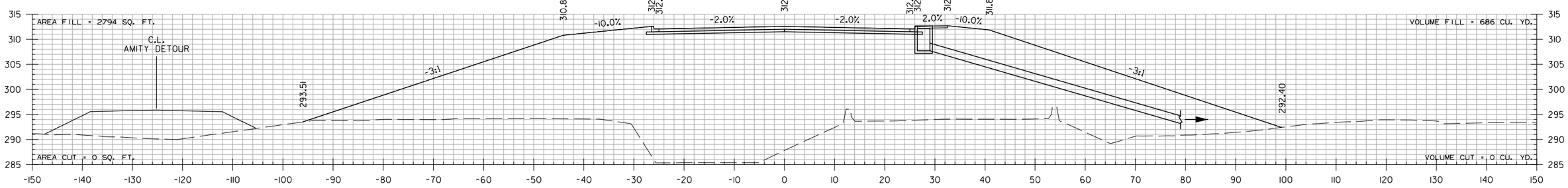
+50 LT.
TOP = 314.64
FL. IN = 309.07
FL. OUT = 308.97

+50 RT.
TOP = 313.89
FL. IN = 308.00
FL. OUT = 305.06

STA. 15+50 CONSTRUCT
DROP INLET ON RT., H = 8'-10"
W/ 24" X 102'
R.C. PIPE CULVERT TO DROP INLET ON RT.
TYPE MO INLET = 4'-0" DIA.
TYPE C INLET = 4'-0" X 3'-3"



15+00.00



14+82.00

+82 RT.
TOP = 312.57
INV. = 307.65

STA. 14+82 CONSTRUCT
DROP INLET ON RT., H = 4'-11"
W/ 18" X 72'
R.C. PIPE CULVERT TO DROP INLET ON RT.
TYPE MO INLET = 4'-0" DIA.
TYPE C INLET = 4'-0" X 2'-6"

AMITY RD.
STA. 14+82 TO STA. 16+00

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WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

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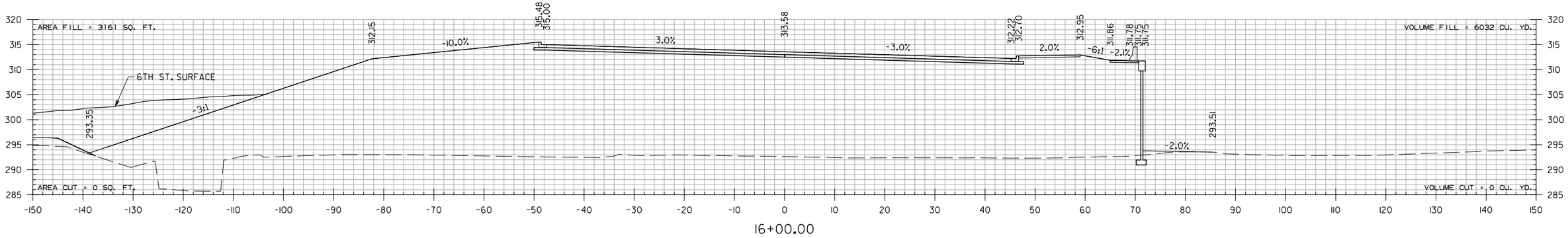
6	ARK.			
JOB NO.		080517	159	182

(2) CROSS SECTIONS

STA. 16+00 END AMITY RD. SOUTH



16+00.00

AMITY RD.
STA. 16+00 TO STA. 16+00

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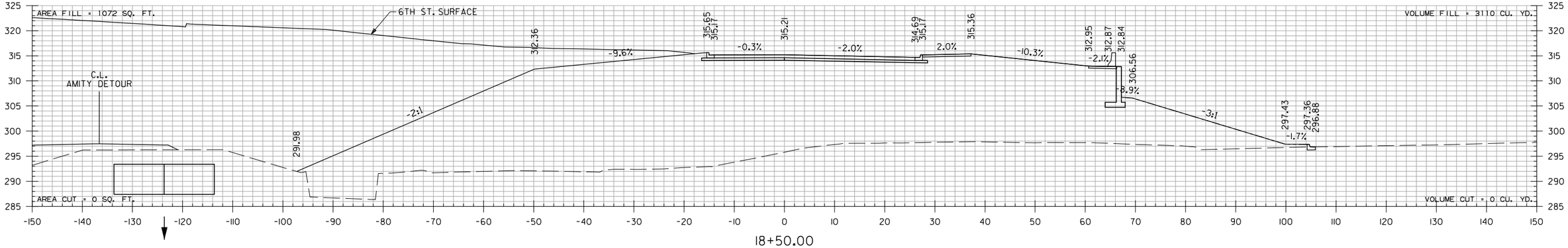
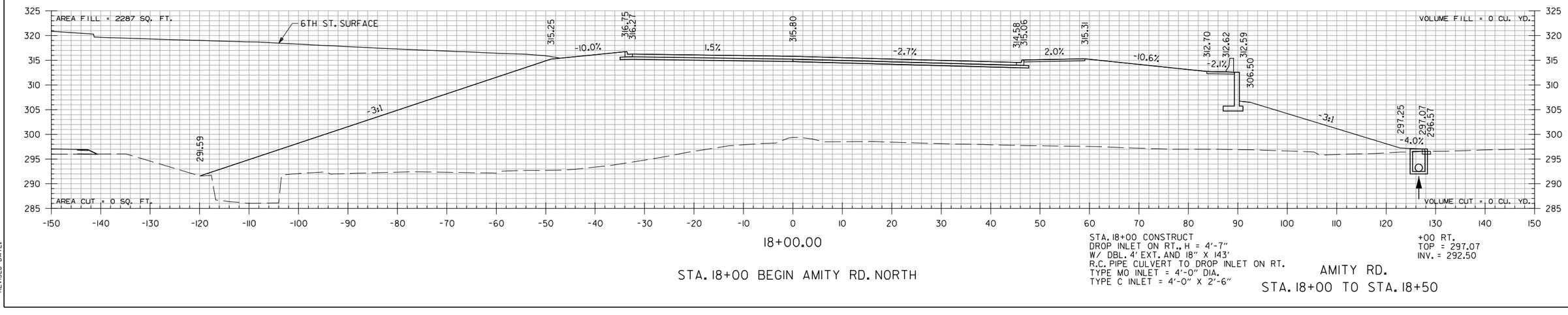
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080517	160	182
(2)	CROSS SECTIONS			



18+50.00



18+00.00

STA. 18+00 BEGIN AMITY RD. NORTH

STA. 18+00 CONSTRUCT
DROP INLET ON RT., H = 4'-7"
W/ DBL. 4' EXT. AND 18" X 143'
R.C. PIPE CULVERT TO DROP INLET ON RT.
TYPE MO INLET = 4'-0" DIA.
TYPE C INLET = 4'-0" X 2'-6"

+00 RT.
TOP = 297.07
INV. = 292.50

AMITY RD.
STA. 18+00 TO STA. 18+50

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WORKSPACE: AHTD
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REVISED DATE:

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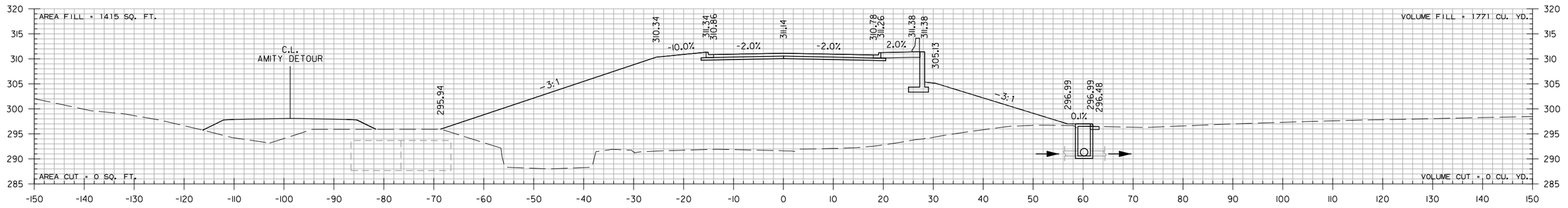
2-10-2016			

FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080517	161	182

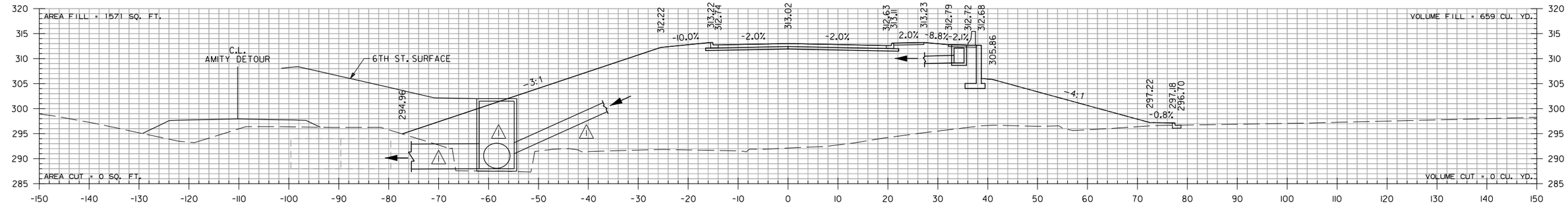
(2) CROSS SECTIONS



19+43.71

STA. 19+44 IN PLACE
12" X 134' R.C. PIPE CULVERT ON RT.
REMOVE 27 L.F.
CONSTRUCT
DROP INLET ON RT., H = 6'-5"
W/ DBL. 4' EXT.
TYPE ST INLET = 4'-0" X 2'-6"
CONNECT TO EXISTING 12" R.C. PIPE CULVERT

+44 RT.
TOP = 296.99
INV. = 290.60



19+11.69

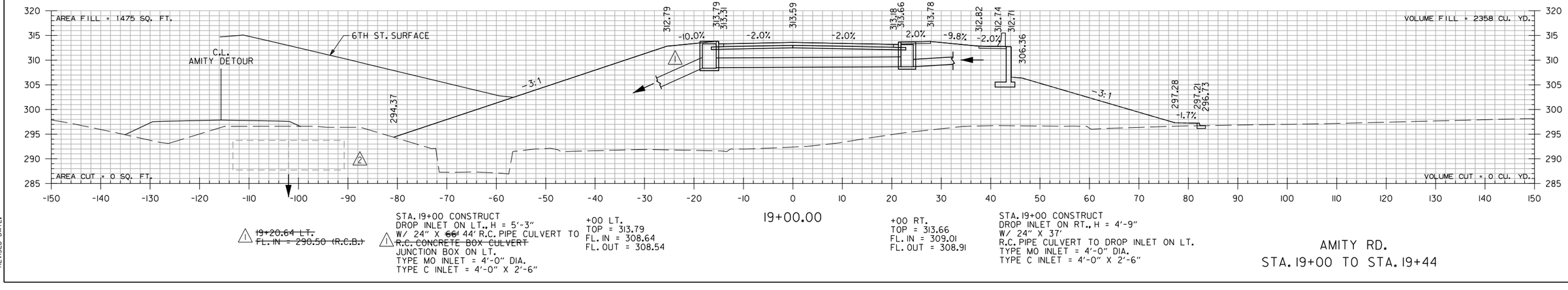
△1 +20.64 LT.
FL. IN = ~~290.50~~ 287.90 (R.C.B.)

△1 +14 LT.
TOP = 302.00
FL. IN = 291.00
FL. IN = 288.10
FL. OUT = 288.00

△1 STA. 19+14 CONSTRUCT
JUNCTION BOX ON LT., H = 14'-0"
W/ 60" X 19' R.C. PIPE CULVERT TO
R.C. CONCRETE BOX CULVERT ON LT.
TYPE E JUNCTION BOX = 6'-6" X 7'-0"

STA. 19+12 CONSTRUCT
DROP INLET ON RT., H =3'-7"
W/ 18" X 13'
R.C. PIPE CULVERT TO DROP INLET ON RT.
TYPE E INLET = 3'-0" x 2'-0"

+12 RT.
TOP = 312.72
INV. = 309.14



19+00.00

△1 ~~19+20.64 LT.~~
~~FL. IN = 290.50 (R.C.B.)~~

△1 STA. 19+00 CONSTRUCT
DROP INLET ON LT., H = 5'-3"
W/ 24" X ~~66'~~ 44' R.C. PIPE CULVERT TO
~~R.C. CONCRETE BOX CULVERT~~
JUNCTION BOX ON LT.
TYPE MO INLET = 4'-0" DIA.
TYPE C INLET = 4'-0" X 2'-6"

+00 LT.
TOP = 313.79
FL. IN = 308.64
FL. OUT = 308.54

+00 RT.
TOP = 313.66
FL. IN = 309.01
FL. OUT = 308.91

STA. 19+00 CONSTRUCT
DROP INLET ON RT., H = 4'-9"
W/ 24" X 37'
R.C. PIPE CULVERT TO DROP INLET ON LT.
TYPE MO INLET = 4'-0" DIA.
TYPE C INLET = 4'-0" X 2'-6"

AMITY RD.
STA. 19+00 TO STA. 19+44

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REVISED DATE:

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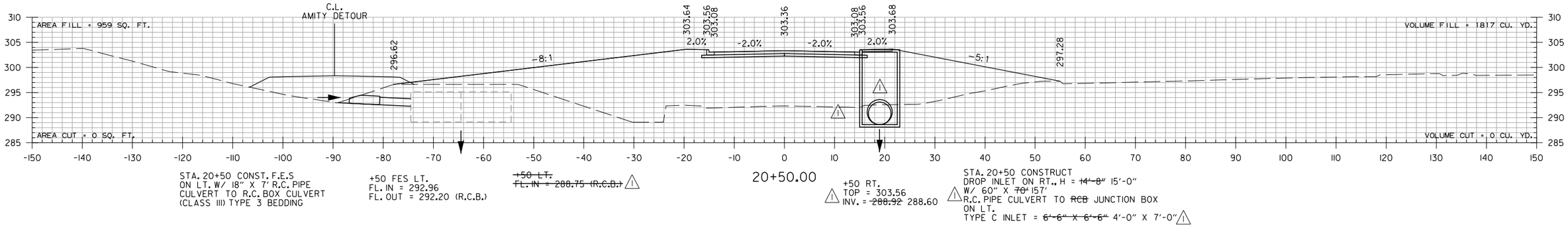
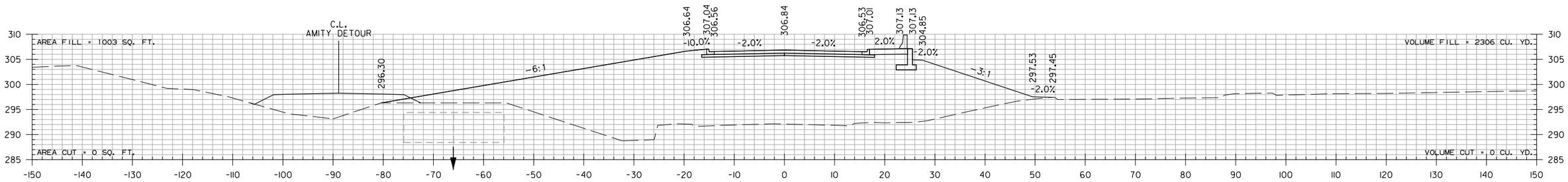
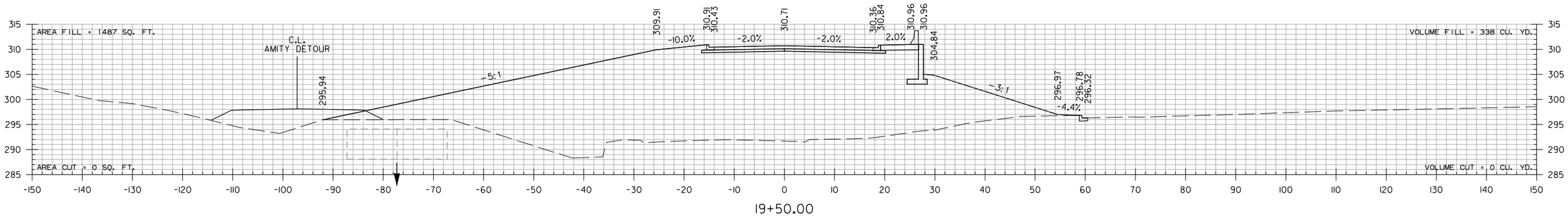
FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080517	162	182

(2) CROSS SECTIONS







AMITY RD.
STA. 20+00 TO STA. 20+70

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WORKSPACE: AHTD
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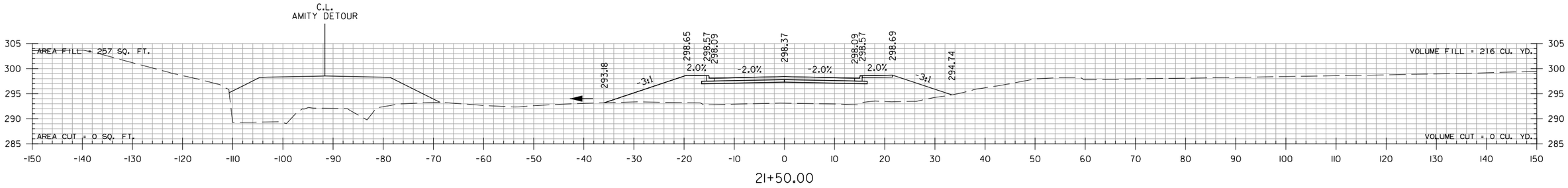
REVISED DATE:

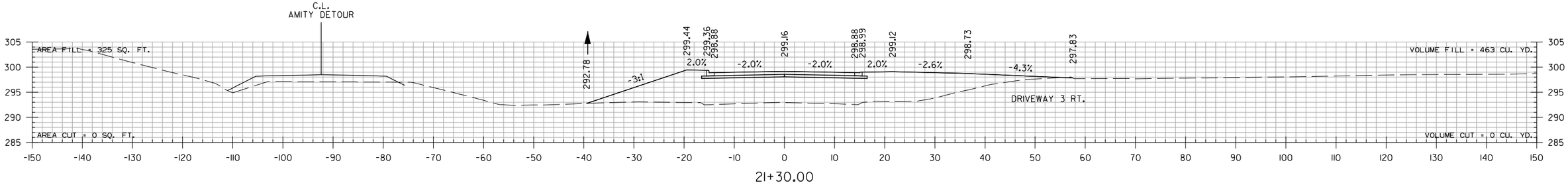
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080517	163	182

(2) CROSS SECTIONS



21+50.00



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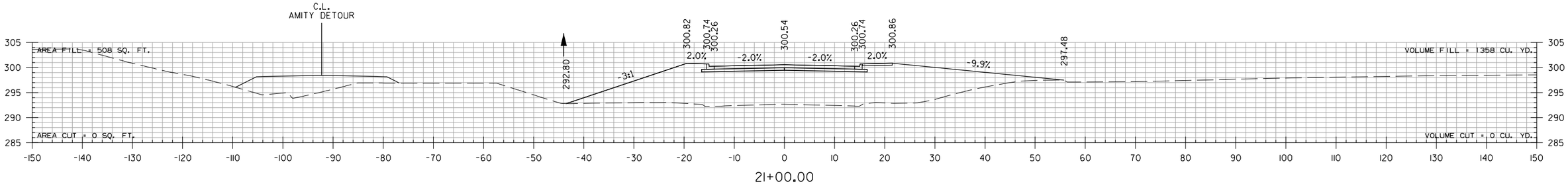

21+00.00

AMITY RD.
STA. 20+81 TO STA. 21+50

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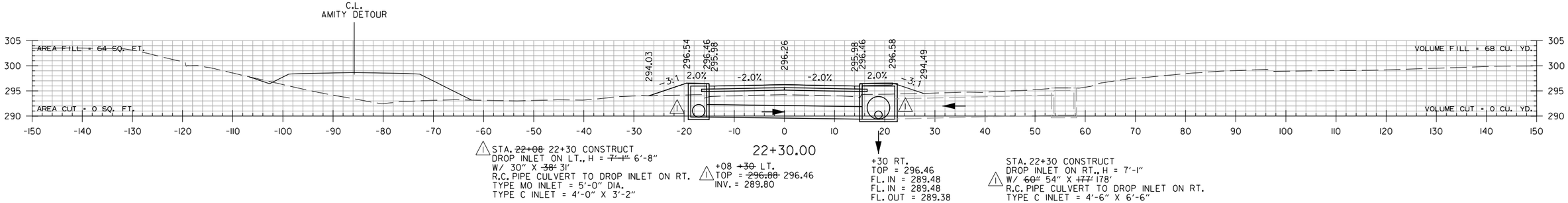
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED
2-10-2016			

FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080517	164	182

(2) CROSS SECTIONS



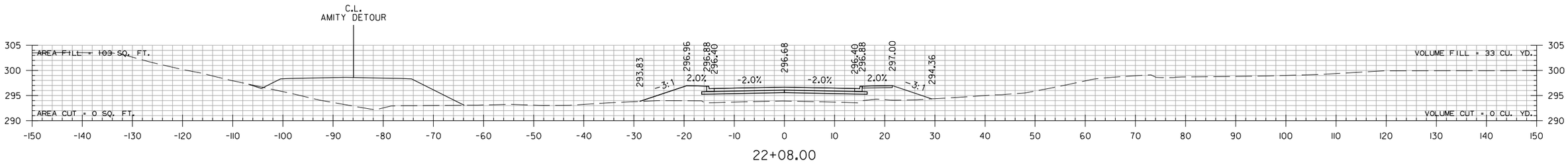
22+30.00

⚠ STA. ~~22+08~~ 22+30 CONSTRUCT
DROP INLET ON LT., H = ~~7'-1"~~ 6'-8"
W/ 30" X ~~38'~~ 31'
R.C. PIPE CULVERT TO DROP INLET ON RT.
TYPE MO INLET = 5'-0" DIA.
TYPE C INLET = 4'-0" X 3'-2"

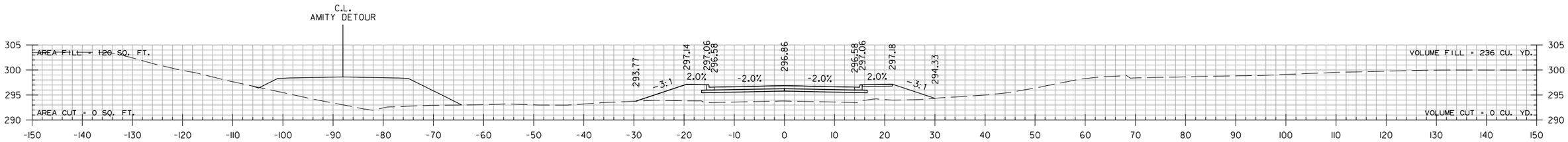
⚠ +08 ~~+30~~ LT.
TOP = ~~296.88~~ 296.46
INV. = 289.80

+30 RT.
TOP = 296.46
FL. IN = 289.48
FL. IN = 289.48
FL. OUT = 289.38

⚠ STA. 22+30 CONSTRUCT
DROP INLET ON RT., H = 7'-1"
W/ ~~60"~~ 54" X ~~177'~~ 178'
R.C. PIPE CULVERT TO DROP INLET ON RT.
TYPE C INLET = 4'-6" X 6'-6"



22+08.00



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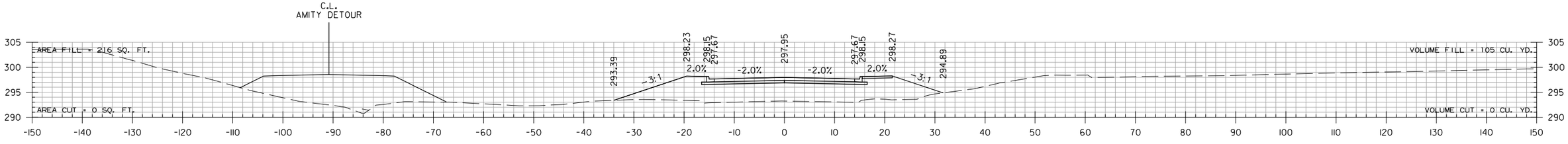

21+62.00

AMITY RD.
STA. 21+62 TO STA. 22+30

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WORKSPACE: AHTD
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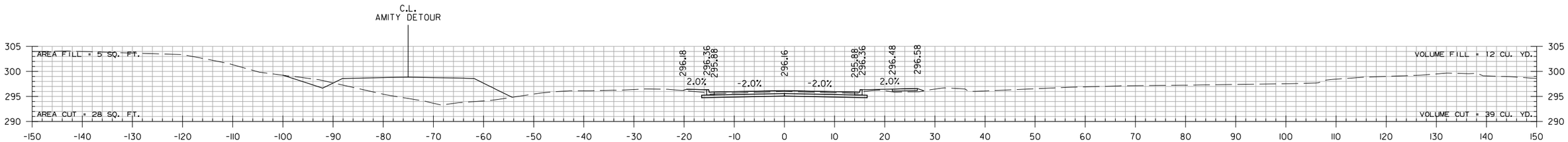
REVISED DATE:

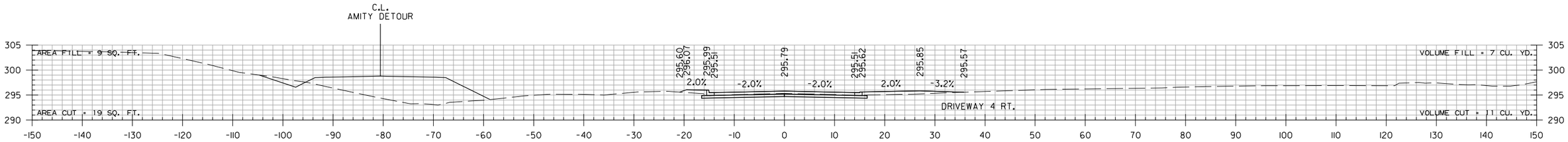
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED
2-10-2016			

FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080517	165	182

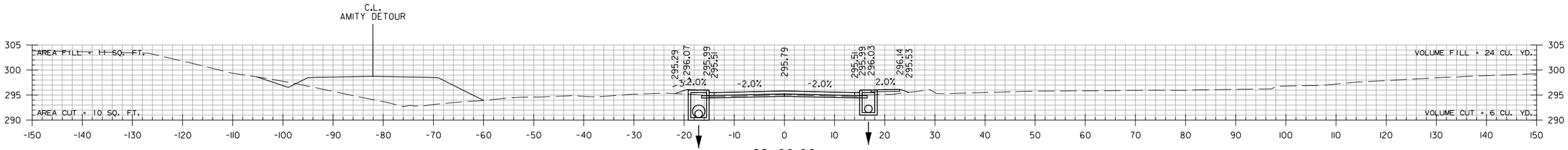
(2) CROSS SECTIONS



23+45.00



23+00.00



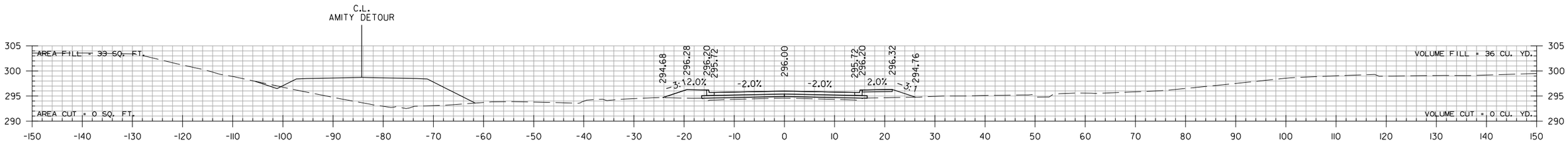
22+80.00

STA. 22+80 CONSTRUCT
DROP INLET ON LT., H = 5'-6"
W/ DBL. 4' EXT. AND 30" X ~~68"~~ 46'
R.C. PIPE CULVERT TO DROP INLET ON LT.
TYPE MO INLET = 5'-0" DIA.
TYPE C INLET = 4'-0" X 3'-2"

+80 LT.
TOP = 295.99
INV. = 290.49

+80 RT.
TOP = 295.99
INV. = 291.49

STA. 22+80 CONSTRUCT
DROP INLET ON RT., H = 4'-6"
W/ DBL. 4' EXT. AND 18" X 46'
R.C. PIPE CULVERT TO DROP INLET ON RT.
TYPE MO INLET = 4'-0" DIA.
TYPE C INLET = 4'-0" X 2'-6"



22+50.00

AMITY RD.
STA. 22+50 TO STA. 23+45

rccorbyn 2/10/2016 4:34:27 PM
WORKSPACE: AHTD
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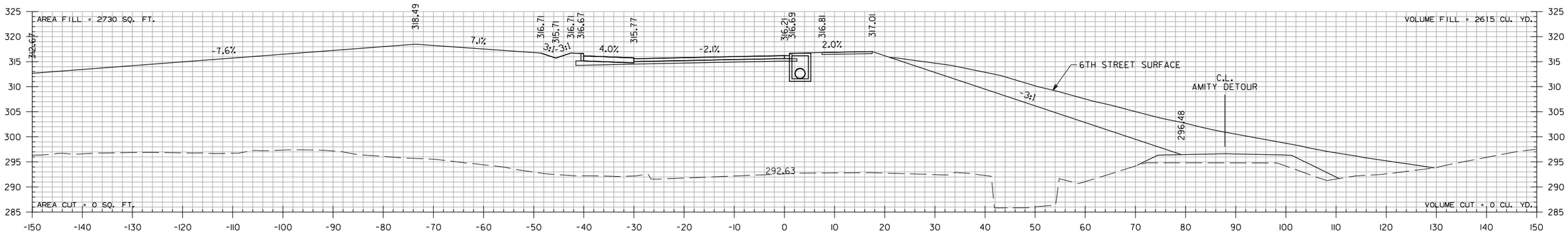
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080517	166	182

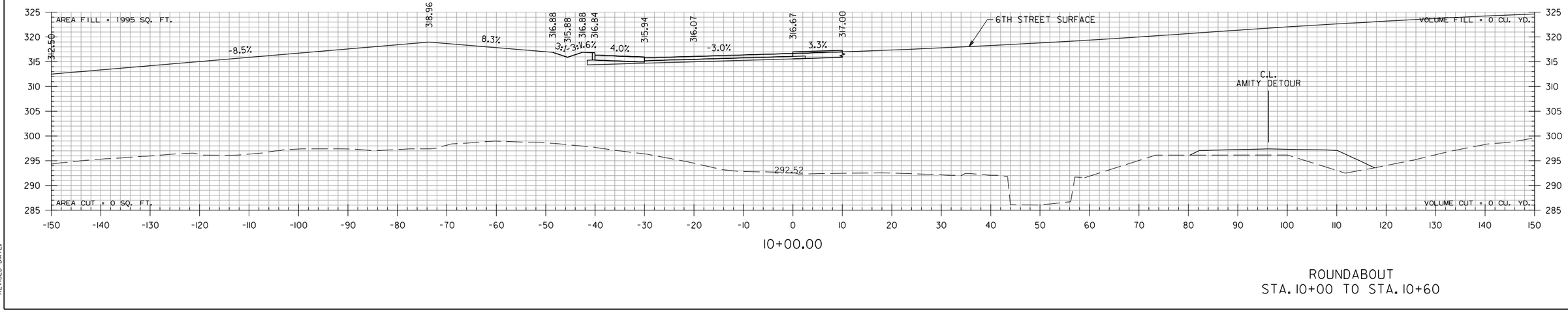
(2) CROSS SECTIONS



10+59.78

+50 RT.
TOP = 316.69
FL. IN = 311.71
FL. OUT = 311.61

STA. 42+50 CONSTRUCT
DROP INLET ON RT., H = 5'-1"
W/ 4' EXT. AND 24" X 105'
R.C. PIPE CULVERT TO DROP INLET ON RT.
TYPE MO INLET = 4'-0" DIA.
TYPE C INLET = 4'-0" X 3'-3"



10+00.00

ROUNDABOUT
STA. 10+00 TO STA. 10+60

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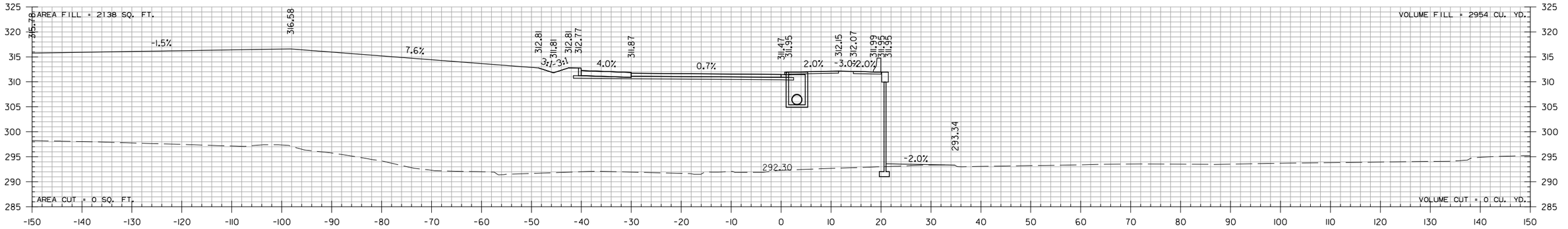
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080517	167	182

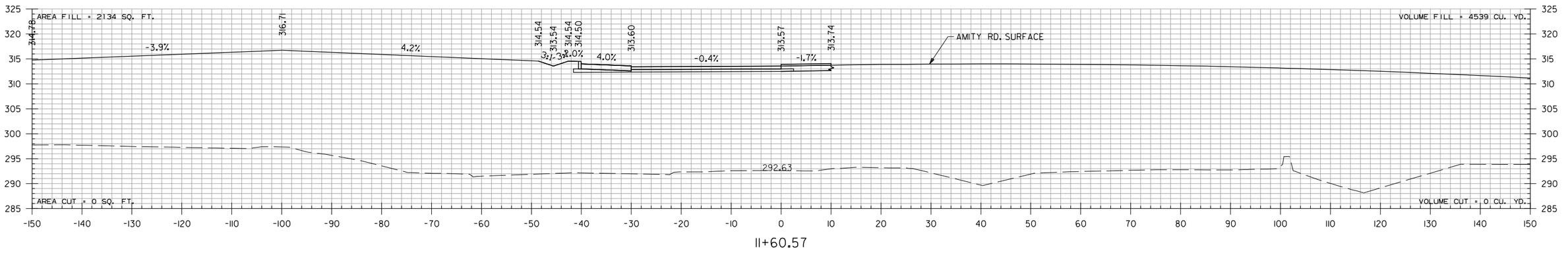
(2) CROSS SECTIONS



12+35.25

+06 RT.
TOP = 311.95
FL. IN = 305.47
FL. OUT = 305.37

STA. 44+06 CONSTRUCT
DROP INLET ON RT., H = 6'-7"
W/ 24" X 81'
R.C. PIPE CULVERT TO DROP INLET ON RT.
TYPE MO INLET = 4'-0" DIA.
TYPE C INLET = 4'-0" X 3'-4"



11+60.57

ROUNDABOUT
STA. 11+61 TO STA. 12+35

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REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED
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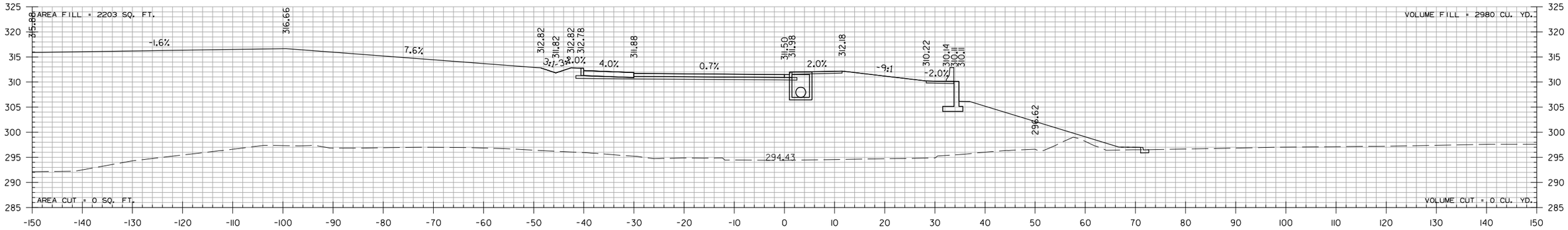
FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080517	168	182

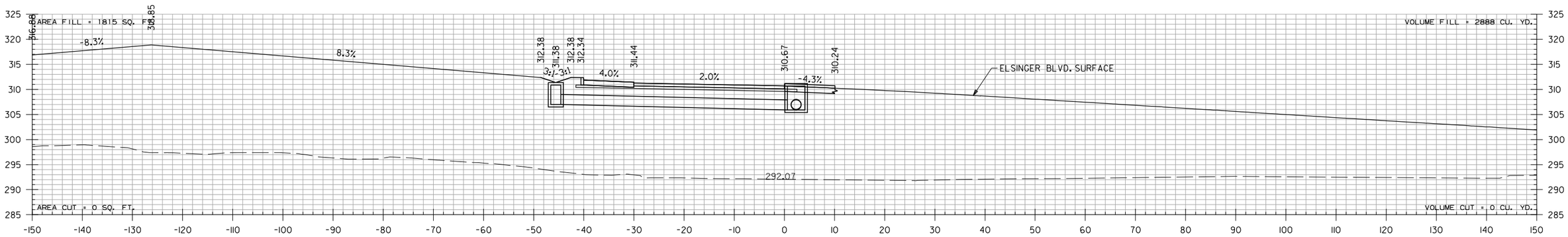
(2) CROSS SECTIONS



13+94.25

+06 LT.
TOP = 311.98
INV. = 306.98

STA. 44+06 CONSTRUCT
DROP INLET ON LT., H = 5'-0"
W/ 24" X 77'
R.C. PIPE CULVERT TO DROP INLET ON RT.
TYPE MO INLET = 4'-0" DIA.
TYPE C INLET = 4'-0" X 3'-6"



13+14.16

⚠1 STA. ~~43+93~~ 43+90 CONSTRUCT
DROP INLET ON C.L., H = 4'-5"
W/ 24" X 45'
R.C. PIPE CULVERT TO DROP INLET ON CL.
TYPE E INLET = 3'-0" X 2'-0"

⚠1 ~~+93~~ +90 CL.
TOP = 311.38
INV. = 306.96

+38 CL.
TOP = 311.17
FL. IN = 306.02
FL. IN = 305.92
FL. OUT = 305.92

STA. 44+38 CONSTRUCT
DROP INLET ON C.L., H = 5'-3"
W/ 24" X 77'
R.C. PIPE CULVERT TO DROP INLET ON RT.
TYPE MO INLET = 4'-0" DIA.
TYPE C INLET = 4'-0" X 3'-6"

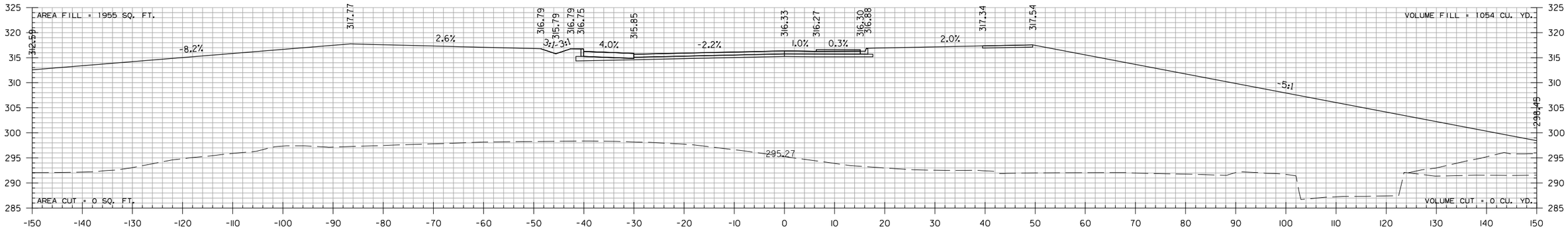
ROUNDABOUT
STA. 13+14 TO STA. 13+94

$$USER$$ $$DATE$$ $$TIME$$
WORKSPACE: $$WORKSPACE$$
$$FILE$$
REVISED DATE:

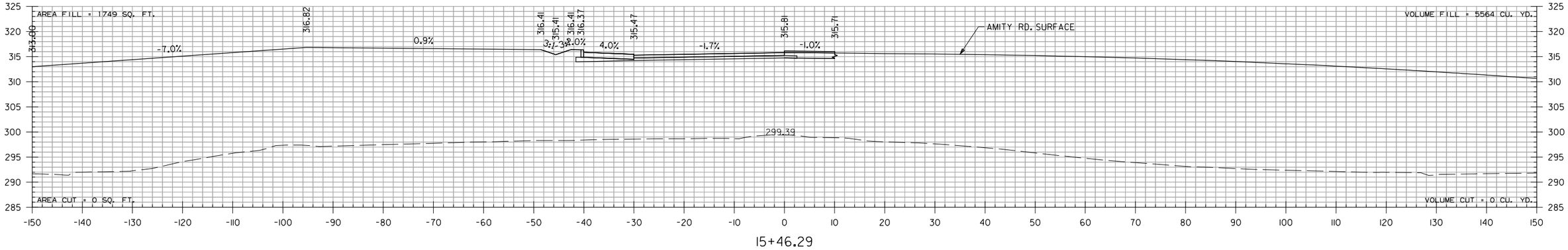
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080517	169	182

(2) CROSS SECTIONS



15+77.03



15+46.29

ROUNDABOUT
STA. 15+46 TO STA. 15+77

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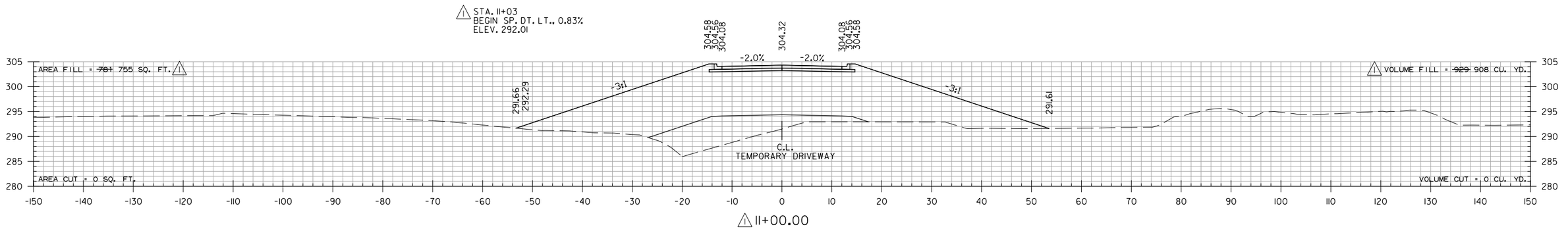
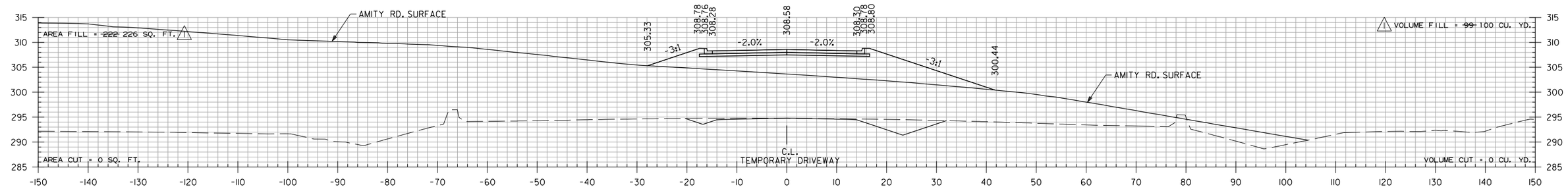
REVISED DATE:

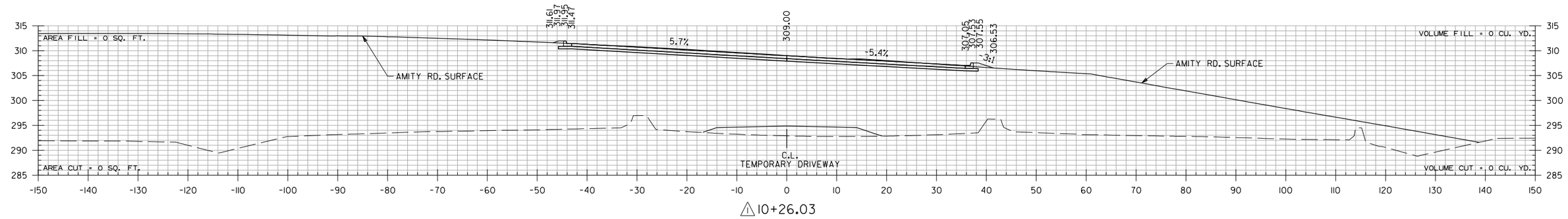
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED
2-10-2016			

FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080517	170	182

(2) CROSS SECTIONS







STA. 10+25.96 BEGIN DRIVEWAY 1

DRIVEWAY 1
STA. 10+26 TO STA. 11+00

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WORKSPACE: AHTD
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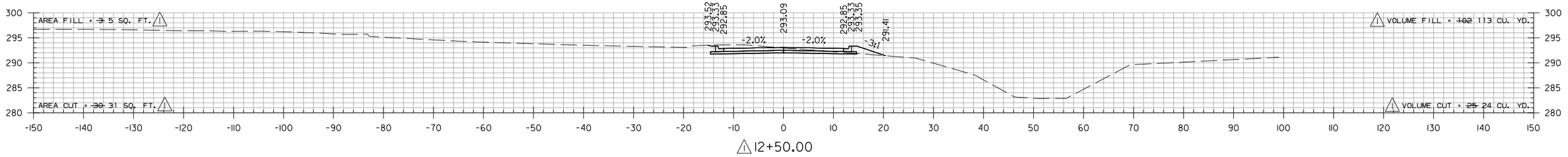
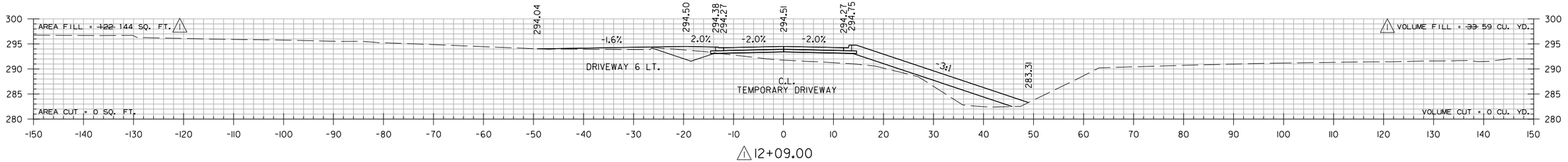
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2-10-2016				6	ARK.			
				JOB NO.		080517	171	182

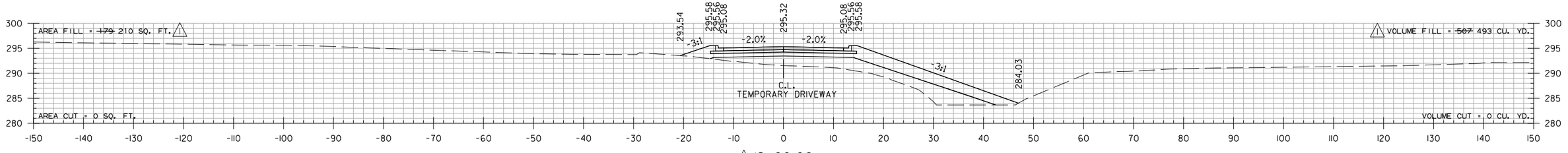
(2) CROSS SECTIONS



12+50.00

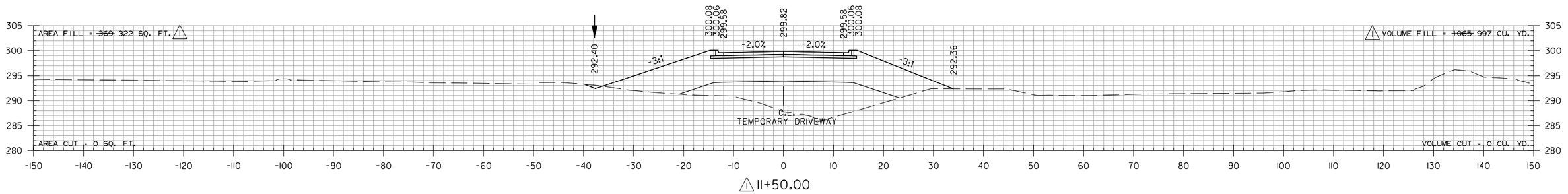


12+09.00



12+00.00

STA. 11+62
END SP. DT. LT., 0.83%
ELEV. 292.50



11+50.00

DRIVEWAY 1
STA. 11+50 TO STA. 12+50

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WORKSPACE: AHTD
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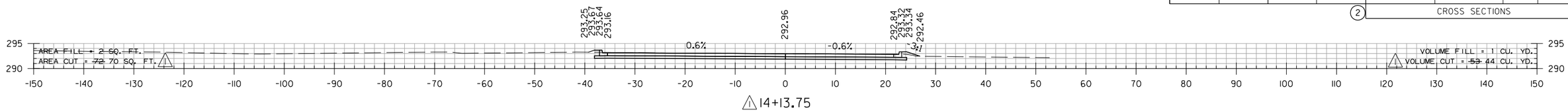
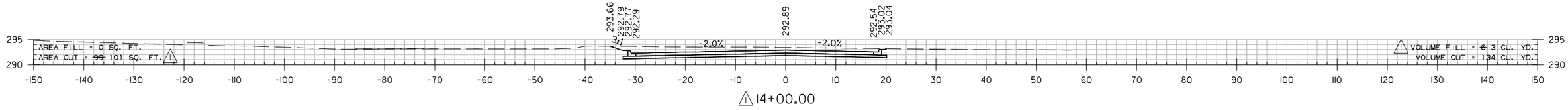
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2-10-2016				6	ARK.			
				JOB NO.		080517	172	182
				(2)	CROSS SECTIONS			

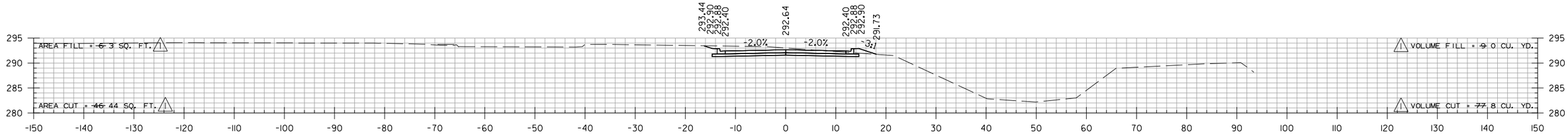
△STA. ~~14+16.74~~ 14+13.75 END DRIVEWAY 1



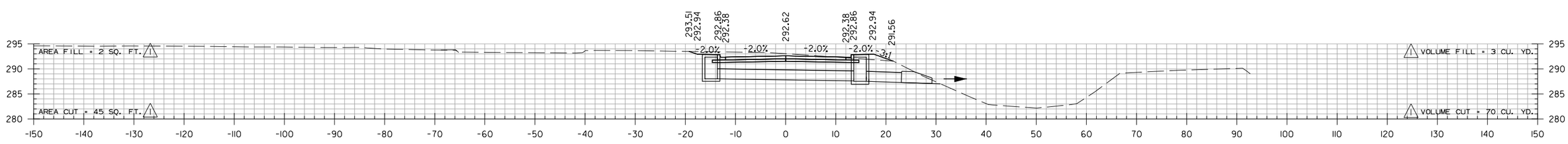
△14+13.75



△14+00.00



△13+50.00



△13+45.00

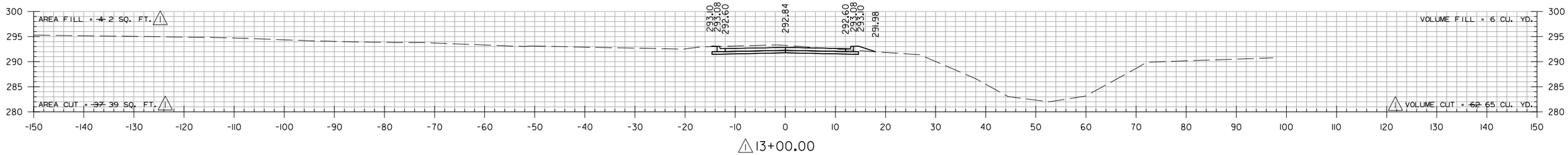
△ STA. ~~13+50~~ 13+45 CONSTRUCT
DROP INLET ON LT. H = 4'-11"
W/ DBL. 4' EXT. AND 24" X 27'
R.C. PIPE CULVERT TO DROP INLET ON RT.
TYPE MO INLET = 4'-0" DIA.
TYPE C INLET = 4'-0" X 2'-6"

△ ~~+50~~ +45 LT.
TOP = ~~292.93~~ 292.86
INV. = ~~288.01~~ 288.02

△ ~~+50~~ +45 RT.
TOP = ~~292.93~~ 292.86
FL. IN = ~~287.53~~ 287.62
FL. OUT = ~~287.43~~ 287.52

△ ~~+50~~ +45 FES RT.
FL. OUT = ~~287.00~~ 287.02

△ STA. ~~13+50~~ 13+45 CONSTRUCT
DROP INLET ON RT. H = ~~5'-6"~~ 5'-4"
W/ DBL. 4' EXT. AND 24" X 7'
R.C. PIPE CULVERT TO FES ON RT.
TYPE MO INLET = 4'-0" DIA.
TYPE C INLET = 4'-0" X 2'-6"



△13+00.00

DRIVEWAY 1
STA. 13+00 TO STA. 14+14

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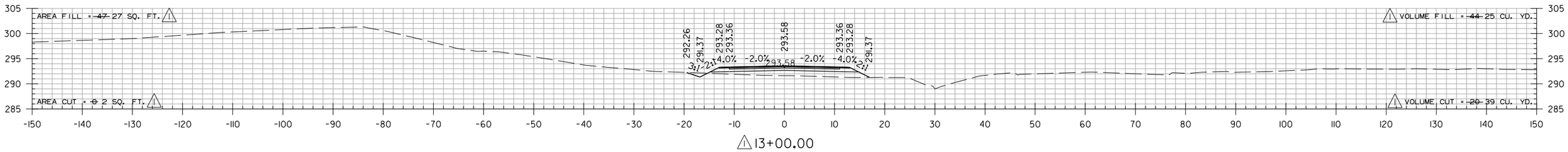
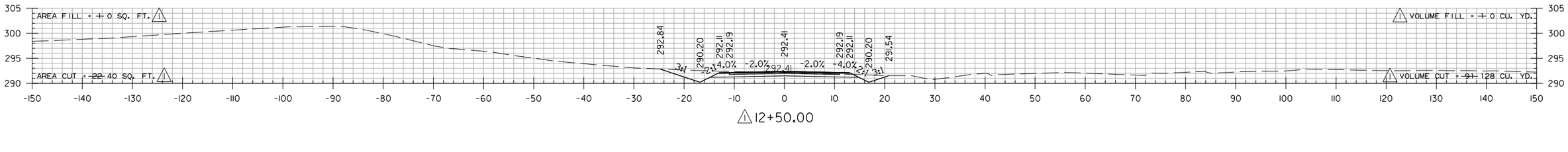
2-10-2016			

FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080517	173	182

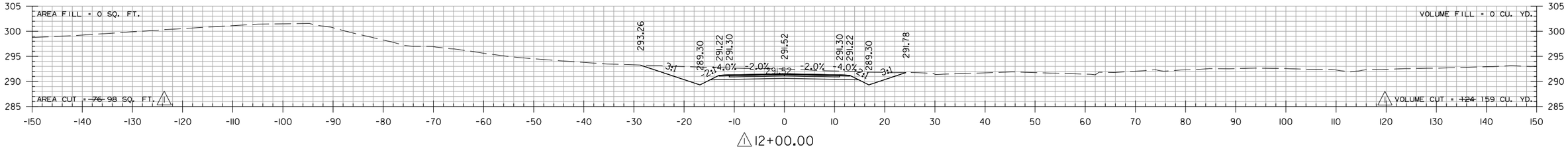
(2) CROSS SECTIONS



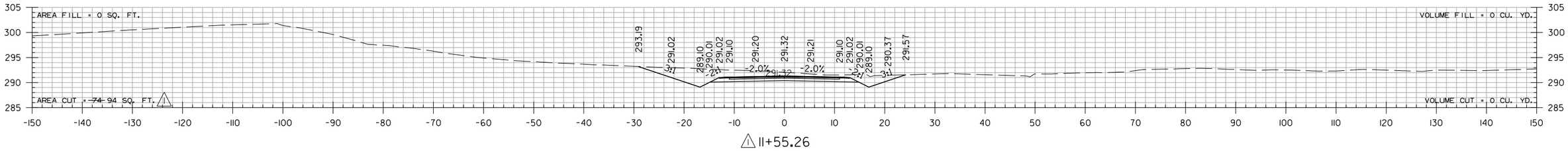
⚠1 13+00.00



⚠1 12+50.00



⚠1 12+00.00



⚠1 11+55.26

⚠STA. ~~11+55.26~~ 11+20.96 BEGIN AMITY RD. DETOUR

AMITY RD. DETOUR
⚠STA. ~~11+55~~ 11+21 TO STA. 13+00

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2-10-2016			

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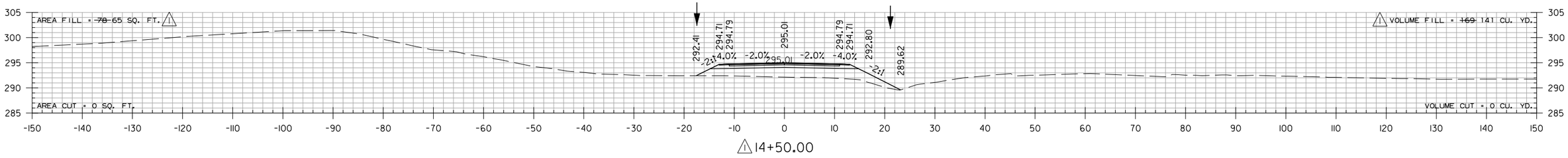
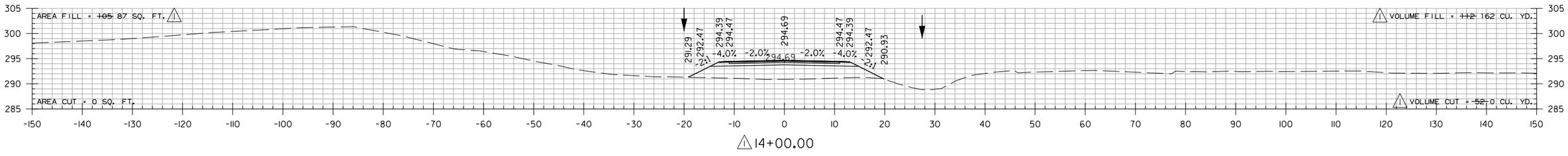
6	ARK.			
JOB NO.		080517	174	182

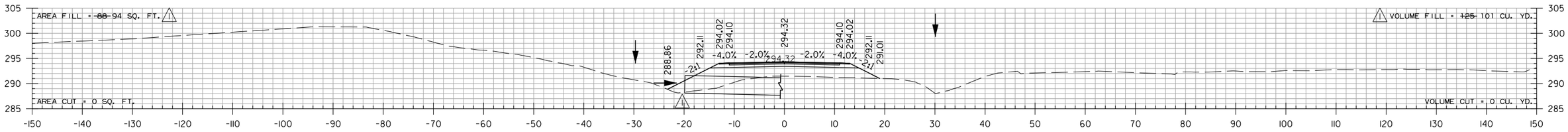
(2) CROSS SECTIONS



1 14+50.00

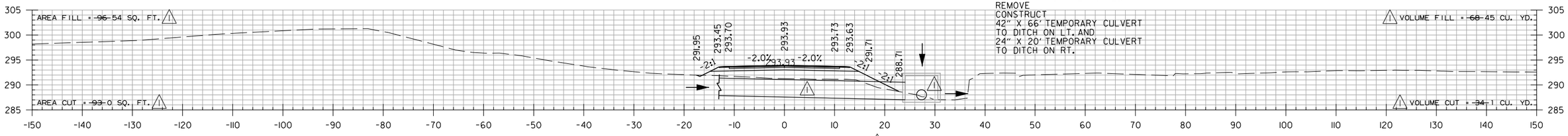


1 14+00.00



1 +49 LT.
FL. = 288.10 LT.

1 13+50.00



1 AMITY RD. DETOUR
STA. 13+20 IN PLACE
DROP INLET ON RT.
RETAIN
WITH 48" X 3' PIPE TO FES
REMOVE
CONSTRUCT
42" X 66' TEMPORARY CULVERT
TO DITCH ON LT. AND
24" X 20' TEMPORARY CULVERT
TO DITCH ON RT.

1 ~~13+70.00~~ 13+19.63

1 +43 RT.
FL. = 289.00 RT.

1 +30 RT.
EXISTING INLET
TOP = 292.35
FL. IN = 287.03
FL. IN = 287.03

1 ~~+70 LT.~~
~~FL. = 288.48~~

1 ~~STA. 13+70 INSTALL~~
~~DBL. 48" X 36' TEMPORARY CULVERT~~
~~CIO = 122 CFS DA = 53.3 AC~~

1 ~~+70 RT.~~
~~FL. = 287.89~~

AMITY RD. DETOUR
STA. 13+20 TO STA. 14+50

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WORKSPACE: AHTD
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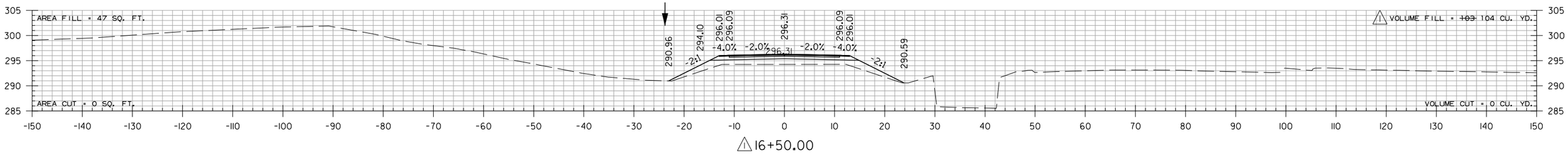
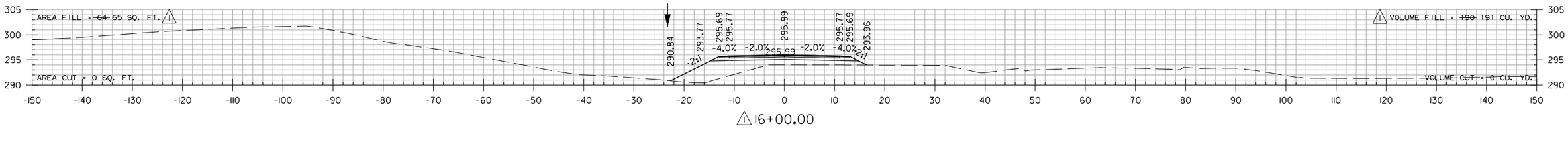
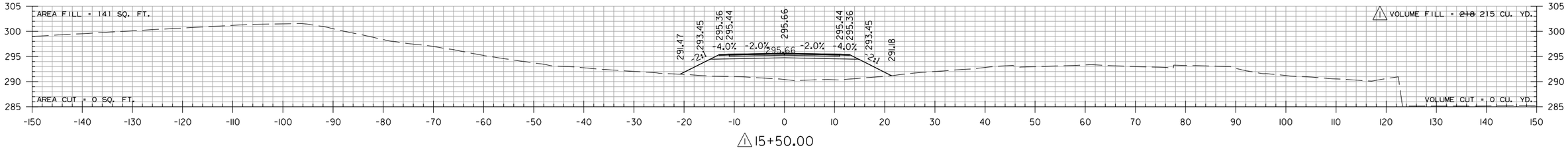
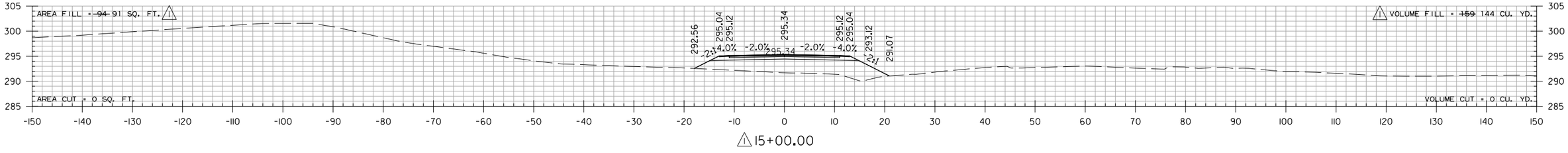
6	ARK.			
JOB NO.		080517	175	182

(2) CROSS SECTIONS









AMITY RD. DETOUR
STA. 15+00 TO STA. 16+50

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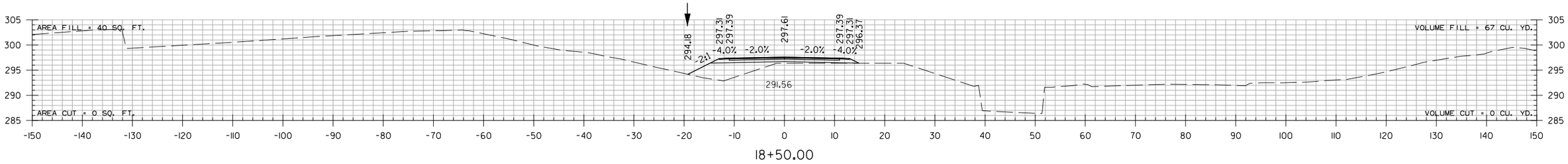
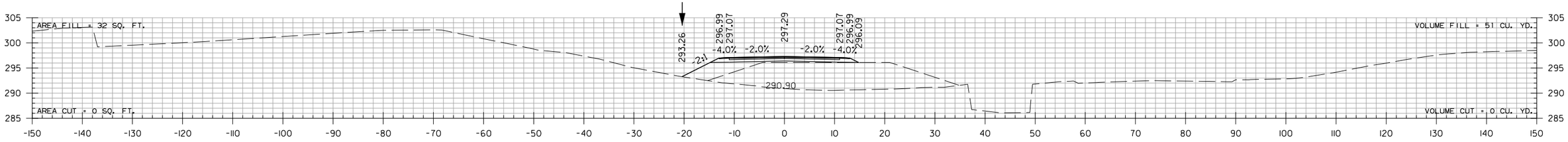
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080517	176	182
				(2)	CROSS SECTIONS			



18+50.00



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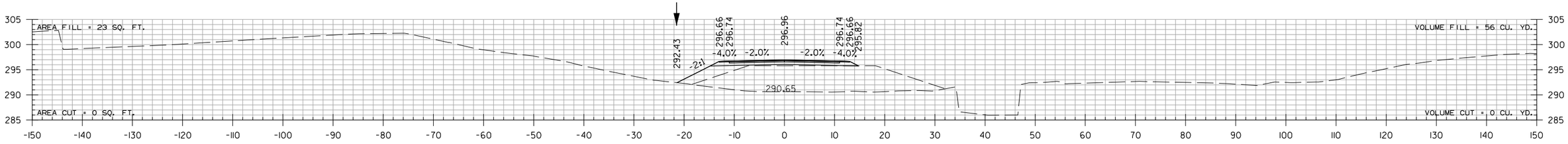
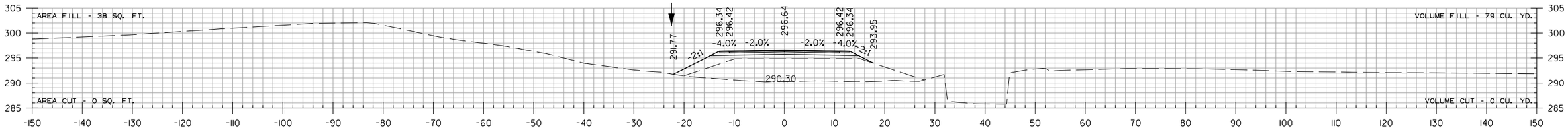


17+50.00



17+00.00

AMITY RD. DETOUR
STA. 17+00 TO STA. 18+50

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WORKSPACE: AHTD
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REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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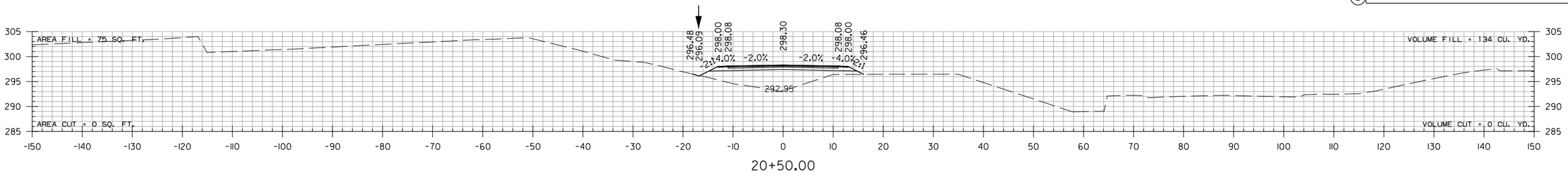
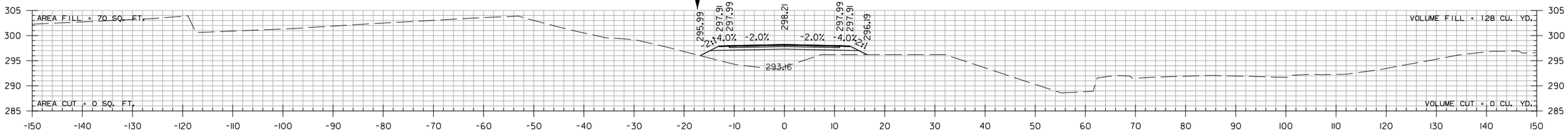
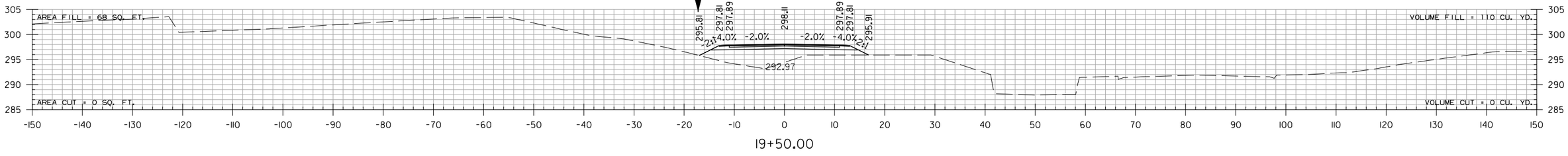


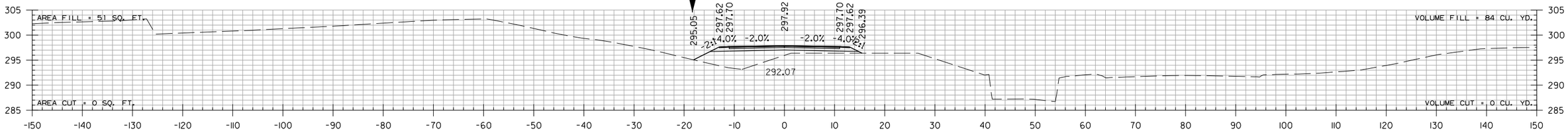
20+50.00



20+00.00



19+50.00



19+00.00

AMITY RD. DETOUR
STA. 19+00 TO STA. 20+50

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REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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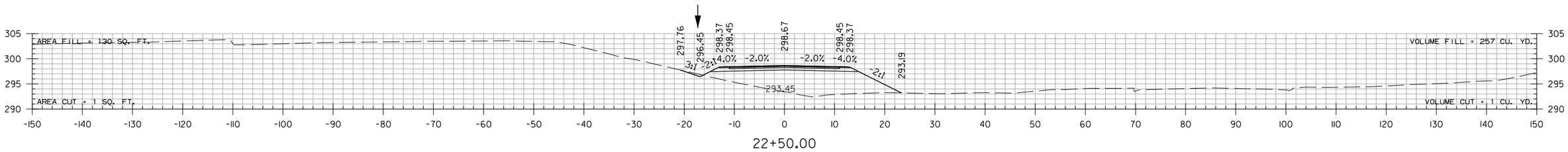
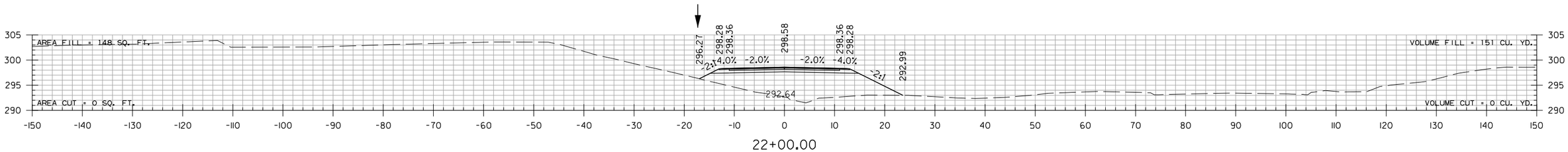
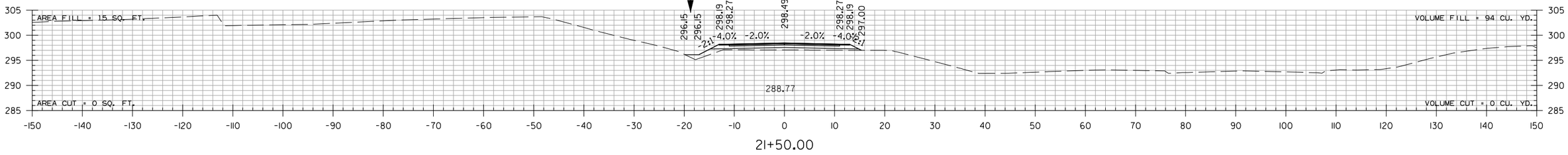


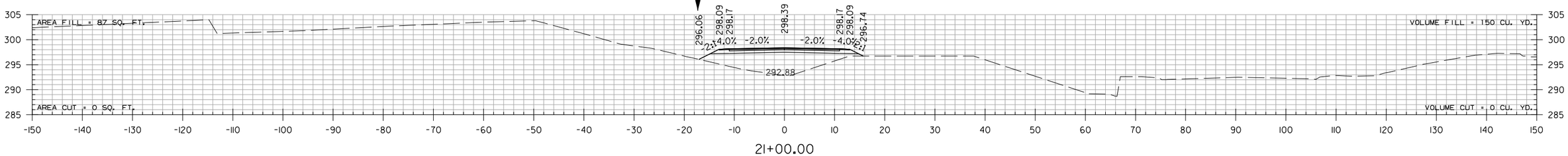
22+50.00



22+00.00



21+50.00



21+00.00

AMITY RD. DETOUR
STA. 21+00 TO STA. 22+50

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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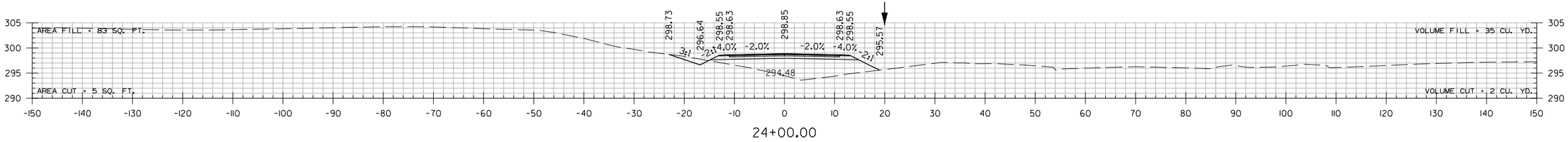
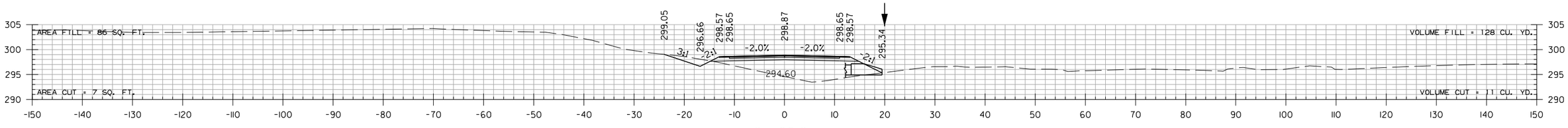


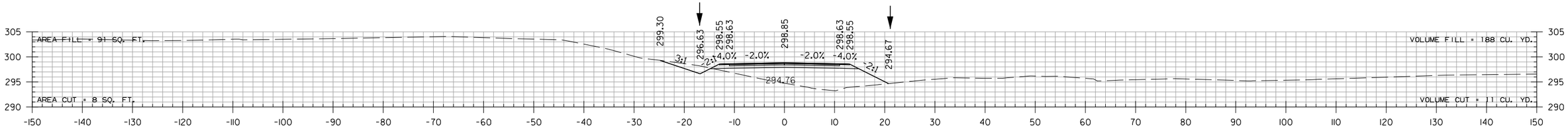
24+00.00



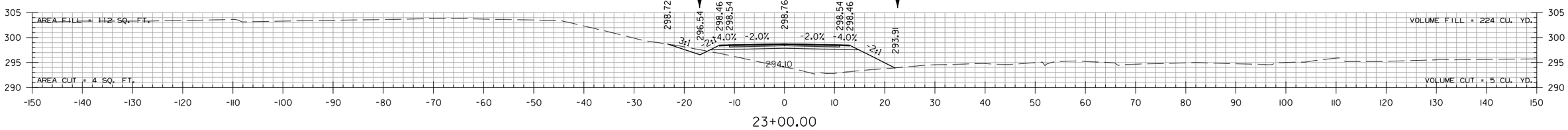
23+88.93

FL. = 294.27 RT.

AMITY RD. DETOUR
STA. 24+52 CONSTRUCT
DBL. 36" X 22" X 115' TEMPORARY ARCH CULVERT
QIO = 35 CFS DA = 25.0 ACRES



23+50.00



23+00.00

AMITY RD. DETOUR
STA. 23+00 TO STA. 24+00

rccorbyn 5/20/2015 7:13:49 AM
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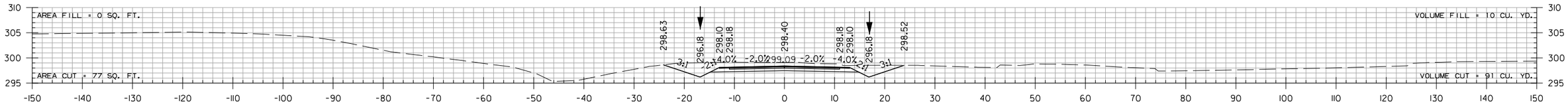
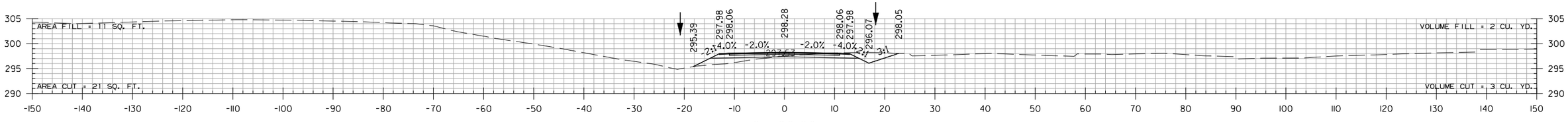
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080517	180	182
				(2)		CROSS SECTIONS		

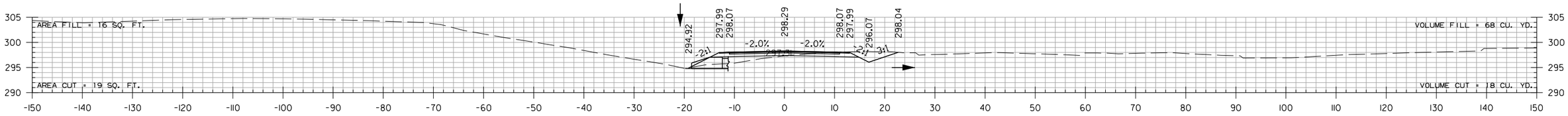
STA. 25+68.21 END AMITY RD. DETOUR



25+50.00



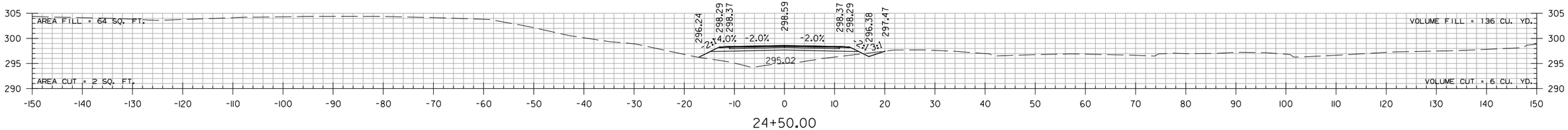
25+00.00



24+95.71

FL. = 294.93 LT.

AMITY RD. DETOUR
STA. 24+52 CONSTRUCT
DBL. 36" X 22" X 115' TEMPORARY ARCH CULVERT
QIO = 35 CFS DA = 25.0 ACRES



24+50.00

AMITY RD. DETOUR
STA. 24+50 TO STA. 25+50

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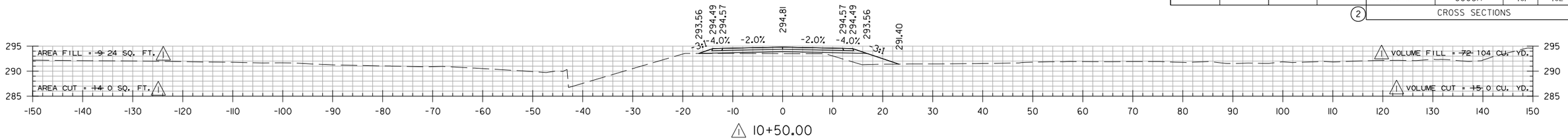
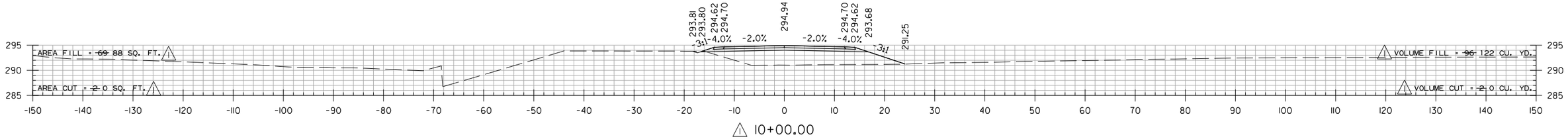
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2-10-2016				6	ARK.			
				JOB NO.		080517	181	182

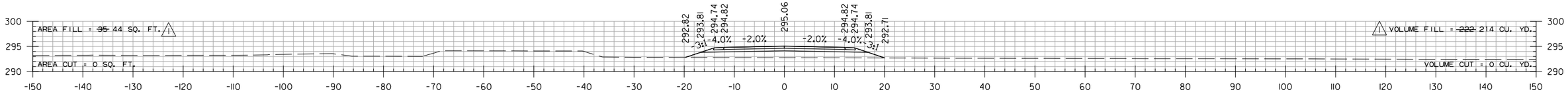
(2) CROSS SECTIONS



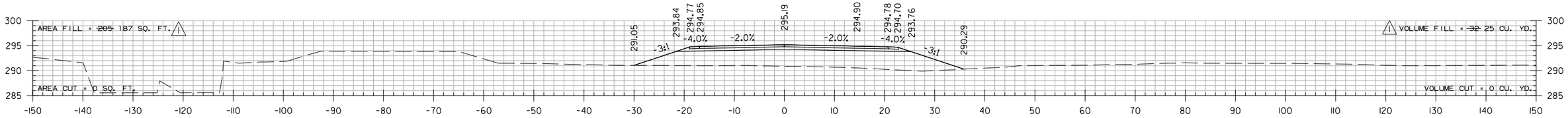
⚠1 10+50.00



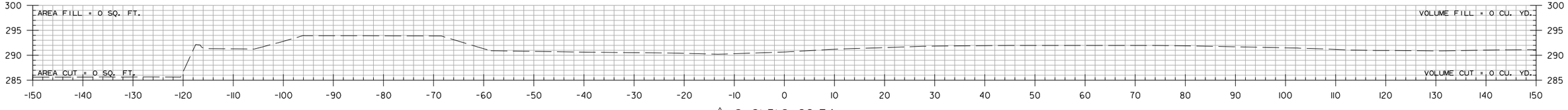
⚠1 10+00.00



⚠1 9+50.00



⚠1 9+00.00



⚠1 ~~8+91.5~~ 8+92.74

⚠1 STA. ~~8+91.5~~ 8+92.75 BEGIN TEMPORARY DRIVEWAY

TEMPORARY DRIVEWAY
STA. 8+92 TO STA. 10+50

rccorbyn 2/10/2016 4:34:28 PM
WORKSPACE: AHTD
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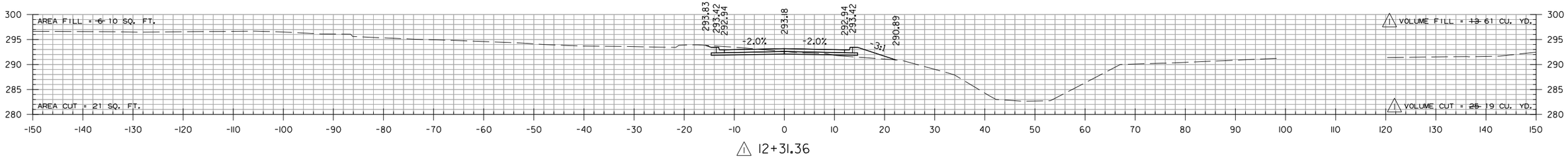
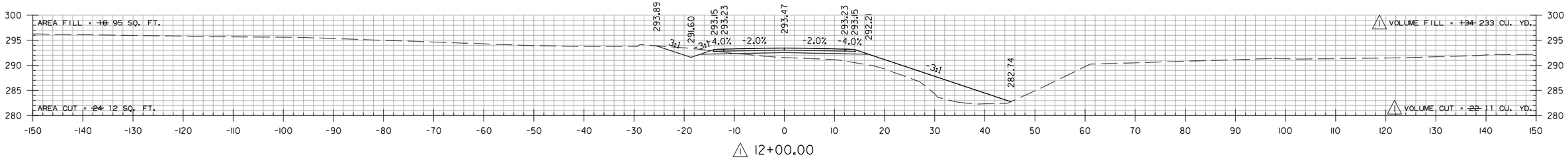
REVISED DATE:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED. AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2-10-2016				6	ARK.			
				JOB NO.		080517	182	182
				(2)		CROSS SECTIONS		

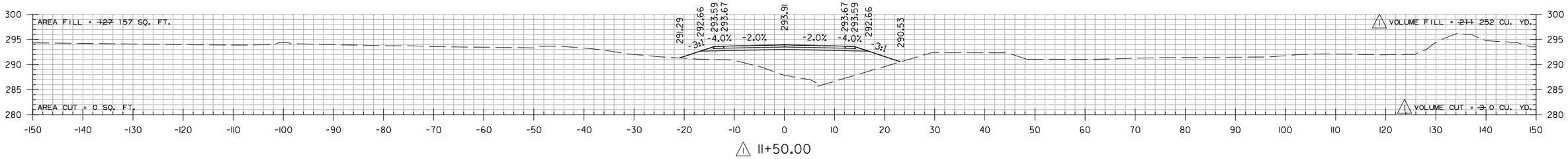
⚠STA. ~~12+30.00~~ 12+31.36 END TEMPORARY DRIVEWAY



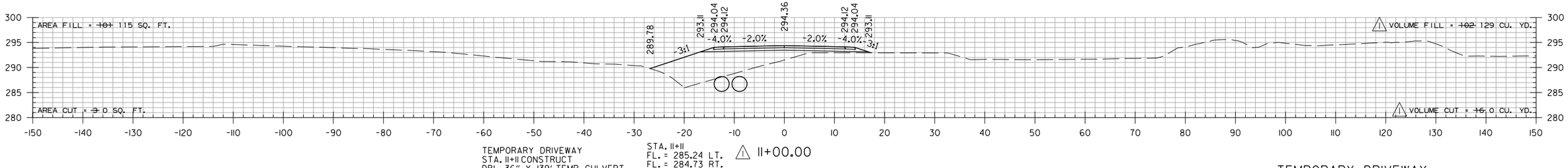
⚠ 12+31.36



⚠ 12+00.00



⚠ 11+50.00



TEMPORARY DRIVEWAY
STA. 11+11 CONSTRUCT
DBL. 36" X 139' TEMP. CULVERT
Q10 = 152 CFS DA = 80.3 ACRES

STA. 11+11
FL. = 285.24 LT.
FL. = 284.73 RT.

⚠ 11+00.00

TEMPORARY DRIVEWAY
STA. 11+00 TO STA. ~~12+30~~ 12+31⚠

rccorbyn 2/10/2016 4:34:28 PM
WORKSPACE: AHTD
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REVISED DATE: